December 28, 2012 - The first day of construction on the Carlsbad Desalination Project, which will provide a local, drought-proof water supply for the region starting in 2016.
NOTICE TO THE PUBLIC
BOARD OF DIRECTORS’ AND STANDING COMMITTEES’
REGULAR MEETING
JANUARY 24, 2013
BOARD ROOM
WATER AUTHORITY HEADQUARTERS BUILDING
4677 OVERLAND AVENUE, SAN DIEGO, CALIFORNIA

1. **UNIFIED AGENDA:** This unified agenda provides a brief description of each item to be considered by the Board and its Administrative and Finance, Engineering and Operations, Imported Water, Legislation, Conservation and Outreach, and Water Planning Committees. For convenience, the agenda for each of the Committees and for the formal Board meeting are stated separately; however, all agendas shall be considered as a single agenda and any item listed on the agenda of any Committee may be acted upon by the Board. All items on the agenda of any Committee, including information items, may be deliberated and become subject to action by the Board.

2. **DOCUMENTS:** Staff reports and any other public information provided to the Board or Committee before the meeting relating to items on the agenda are available for public review at the San Diego County Water Authority 4677 Overland Avenue San Diego, CA 92123 during normal business hours. Additional documents may be distributed at the meeting. Copies of individual items, including the background information, are available through the Clerk of the Board at (858) 522-6614.

3. **MEETING TIMES:** The morning session of Standing Committees will commence at **9:00 a.m. on January 24, 2013** the afternoon session of Standing Committees will commence at **1:00 p.m.** Please see the meeting schedule. The full Board will convene in formal session at **3:00 p.m.** or as soon thereafter as the last Committee meeting is completed.

4. **ACTION AT COMMITTEE MEETINGS:** Committee meetings are also noticed as meetings of the Board because a quorum of the Board may be present. Members of the Board who are not members of the Committee may participate in the meeting, but only members of the Committee may make, second or vote on any motion or other action of the Committee unless the Board determines to convene for consideration of action on an item or items on the Committee agenda. If a quorum of the Board is present during a Committee meeting, upon approval of a motion by any Board member to convene for consideration of action on an item or items on the Committee agenda, the Board may take action on that item or items. If the Board takes action on an item during a Committee meeting, the matter will not be subject to further action at the Formal Board meeting unless a motion to reconsider is approved according to the provisions of the Water Authority Administrative Code. Persons interested in an item and wishing to hear the staff report, present oral or written comments and hear the deliberations should attend the Committee meeting. Closed Sessions also occur at Committee meetings and may not be repeated at the formal Board meeting.

5. **CONSENT CALENDAR:** The agenda contains items listed on a consent calendar which is for matters considered routine or otherwise not requiring further deliberation. A committee or the Board will take action as recommended by one motion. There will be no individual discussion on such items prior to the vote unless an item is removed for discussion. If a member of the public wishes to
talk about a consent calendar item, please notify the Chair before the calendar is called. Persons who wish to be heard on an item are encouraged to speak before the assigned committee.

6. **PUBLIC HEARINGS**: It is not necessary to notify the Chair if a member of the public wishes to speak on items listed on the agenda as public hearings. Public hearings will begin at the time stated in the notice, or as soon thereafter as the matter can be heard. When the Chair opens the hearing, upon invitation of the Chair, step to the podium and begin by giving your name and address for the record. Each speaker has 3 minutes to address the Board.

7. **PUBLIC COMMENT ON MATTERS NOT ON THE AGENDA**: The agenda provides an opportunity for members of the public to address the Committees and Board on matters of interest within the jurisdiction of the Committee or Board that are not listed on the agenda. The Brown Act does not allow any discussion or action by the Board or staff on matters raised during public comment except: 1) to briefly respond to statements made or questions posed; 2) ask a question for clarification; 3) receive and file the matter; 4) if it is within staff's authority, refer it to them for a reply; or, 5) direct that it be placed on a future board agenda for a report or action.

A reasonable amount of time will be allocated by the Chair for public comment. Persons wishing to speak should notify the Chair before the meeting by filling out a "Speaker Request Form" and give it to the secretary. Individual speakers are requested to be as brief as possible and are encouraged to address the appropriate committee who is best able to respond. When the Chair calls, please immediately step to the podium and begin by giving your name and address for the record. Each speaker has 3 minutes to address the Board.

8. **PUBLIC COMMENT ON AGENDA ITEMS**: Persons wishing to speak to an item that is listed on the agenda should notify the Chair before the meeting by filling out a speaker request form and giving it to the secretary. Step to the lectern when asked to do so by the Chair and begin by giving your name and address for the record. Remarks should be limited to three minutes.

9. **INFORMATION ITEMS**: Items are listed on the agenda as information based on staff's judgment. Circumstances or the committee's or Board's judgments may require deliberation or, if necessary, action on these items. Any member of the public with an interest in one of these items should review the background material and request information on the possible action that could be taken.

10. **ASSISTANCE FOR THE DISABLED**: If you are disabled in any way and need accommodation to participate in the Board meeting, please call the Clerk of the Board at (858) 522-6614 for assistance at least three (3) working days prior to the meeting so the necessary arrangements can be made.

11. **RULES GOVERNING MEETINGS**: The Water Authority’s Administrative Code Chapter 2.00 governs conduct of meetings of the Board and the Committees. The Administrative Code is available on line at [www.sdcwa.org](http://www.sdcwa.org) or at the Water Authority Headquarters.
# MEETING SCHEDULE

**JANUARY 24, 2013**

<table>
<thead>
<tr>
<th>MORNING SESSION</th>
<th>9:00 a.m. to 12:00 p.m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative &amp; Finance</td>
<td>Estimated time: 45 minutes</td>
</tr>
<tr>
<td>Water Planning</td>
<td>Estimated time: 40 minutes</td>
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<tr>
<td>Imported Water</td>
<td>Estimated time: 1 hour 25 minutes</td>
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<thead>
<tr>
<th>LUNCHEON FOR DIRECTORS</th>
<th>12:00 p.m. to 1:00 p.m.</th>
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<table>
<thead>
<tr>
<th>AFTERNOON SESSION</th>
<th>1:00 p.m. to 3:00 p.m.</th>
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<tbody>
<tr>
<td>Legislation, Conservation &amp; Outreach</td>
<td>Estimated time: 40 minutes</td>
</tr>
<tr>
<td>Engineering &amp; Operations</td>
<td>Estimated time: 1 hour 10 minutes</td>
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</table>

<table>
<thead>
<tr>
<th>FORMAL BOARD MEETING</th>
<th>3:00 p.m.</th>
</tr>
</thead>
</table>

* Time estimates are for convenience only and do not constitute part of the schedule. The first morning session will commence at **9:00 a.m.**, and the following morning sessions may start at any time after **9:00 a.m.** The first afternoon session will commence at **1:00 p.m.**, and the following afternoon sessions may start at any time after **1:00 p.m.** The Board meeting will start no earlier than **3:00 p.m.**, or following the conclusion of the last committee meeting.
ADMINISTRATIVE AND FINANCE COMMITTEE

AGENDA FOR

JANUARY 24, 2013

Javier Saunders – Chair    Keith Lewinger
Gary Arant – Vice Chair    Dennis Sanford
Barbara Wight – Vice Chair  Bob Topolovac
Roger Bailey               Mark Watton
Marilyn Dailey            Mark Weston
Frank Hilliker           Ken Williams
Michael Hogan             Doug Wilson

1. Roll call – determination of quorum.

2. Additions to agenda (Government Code Section 54954.2(b)).

3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

4. Chair’s report.
   4-A Directors’ comments.

I. CONSENT CALENDAR

1. Treasurer’s report.    Tracy McCraner
   Staff recommendation: Note and file the monthly Treasurer’s report.
   (Action)

II. ACTION/DISCUSSION

1. Authorize the issuance of Senior Lien Water Revenue Refunding Bonds – Series 2013A to refund certain outstanding long-term debt to yield debt service savings.    David Shank
   Staff recommendation:
   (1) Adopt a resolution authorizing the issuance of Senior Lien Water Revenue Refunding Bonds, Series 2013A, for the purpose of refunding certain existing long-term debt; and authorize the Director of Finance to utilize a negotiated method of sale.
   (2) Approve the forms of financing documents for both refunding bond issuances, including the Preliminary Official Statements for the 2013A Bonds.  (Action)
2. Development of the upcoming Fiscal Years 2014 and 2015 Recommended Budget. (Information)  
   Maureen Stapleton

III. INFORMATION
1. Presentation on Desalination Bond pricing and Investor outreach. Sandra Kerl
2. Board of Directors’ Fourth Quarter 2012 expenses and attendance. Rod Greek
3. Controller’s report on monthly financial reports. Rod Greek
4. Board calendar.

IV. CLOSED SESSION

V. ADJOURNMENT
   Doria F. Lore
   Clerk of the Board

NOTE: This meeting is called as an Administrative and Finance Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.
January 16, 2013

Attention:  Administrative and Finance Committee

Treasurer’s Report

Attached for review by the Administrative and Finance Committee and the Board of Directors is the Treasurer’s Report as of December 31, 2012. The reports are formatted to provide information as required by the California Government Code and the San Diego County Water Authority’s Annual Statement of Investment Policy, which was last adopted by the Board on November 29, 2012. A brief description of each report follows:

Portfolio Master Summary:  This one page report summarizes all cash and investments held by the Water Authority.

Portfolio Characteristics:  This one page snapshot shows the Water Authority’s portfolio holdings by type and percentage; the maturity distribution of the portfolio; the portfolio yield for the past twelve months, with and without bond-related funds, compared to a rolling average yield of the Board adopted benchmark; the credit quality of the portfolio’s holdings; the cash flow projections for the next six months; and relevant market information.

Portfolio Details - Investments:  This report takes the summary information listed in the Portfolio Master Summary and provides details of active investments.

Activity Summary:  This one page report produces a thirteen-month rolling summary of portfolio investment activity.

The Water Authority’s portfolio is diversified among investment types, with a current concentration toward short-term maturities. This concentration is the result of cash flow needs, as well as the current historic low interest rate environment. The portfolio is comprised of high quality investments, with 76 percent currently invested in AAA rated or AAA/AA+ split-rated securities. The AAA/AA+ split rating is due to Standard & Poor’s August 2011 downgrade of both the United States and government agency credit ratings from AAA to AA+; while the other two credit rating agencies (Fitch and Moody’s) have maintained the ratings at AAA. The Water Authority’s overall portfolio yield remained steady at 0.69 percent in December 2012 and continues to exceed the investment benchmark of 0.17 percent in December 2012. Bond Fund proceeds are expected to fund Capital Improvement Program expenditures for the next several years.

All investments have been made in accordance with the San Diego County Water Authority Statement of Investment Policy. This report provides documentation that the Water Authority has sufficient funds to meet the financial obligations for the next six months. The market value information is provided by Bloomberg L.P. and is as of the report date.

Tracy M. McCraner, Director of Finance/Treasurer
### PORTFOLIO PERCENTAGES

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Permitted By Board Policy</th>
<th>Actual Percentage</th>
<th>Actual Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Agency Investment Fund (LAIF)</td>
<td>$50 Million</td>
<td>14.06%</td>
<td>$49,360,223</td>
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<tr>
<td>Banker's Acceptances</td>
<td>20%</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Treasury Securities</td>
<td>15% - Minimum</td>
<td>16.91%</td>
<td>$59,364,808</td>
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<tr>
<td>Agency Securities</td>
<td>85%</td>
<td>56.47%</td>
<td>$198,217,769</td>
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<tr>
<td>Reverse Repurchase Agreements</td>
<td>20%</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Certificates of Deposit (CDARS)</td>
<td>15%</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit</td>
<td>15%</td>
<td>0.00%</td>
<td>0</td>
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<tr>
<td>Commercial Paper</td>
<td>25%</td>
<td>9.72%</td>
<td>$34,108,995</td>
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<tr>
<td>Medium Term Notes/Corporates</td>
<td>30%</td>
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<tr>
<td>JPA Pools (CAMP)</td>
<td>25%</td>
<td>2.69%</td>
<td>$9,441,994</td>
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<tr>
<td>Money Market Funds</td>
<td>15%</td>
<td>0.15%</td>
<td>503,208</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>100.00%</td>
<td>$350,996,997</td>
</tr>
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</table>

- **Accrued Interest (unavailable for investing)**: $58,633
- **Checking/Petty Cash/Available Funds (unavailable for investing)**: $2,389,497

**Subtotal for Pooled Funds:** $353,445,127

#### Bond/CP Fund Excluded from Portfolio Percentages:
- Treasury Securities: $0
- Agency Securities: 95,164,491
- Certificates of Deposit (CDARS): $0
- Commercial Paper: $0
- Local Agency Investment Fund (LAIF): 122,259,150
- JPA Pools (CAMP): 31,485,688
- Money Market Funds and Cash: 7

**Accrued Interest (unavailable for investing):** $248,909,336

**Subtotal for Bond/CP Fund (available for CIP expenditures):** $248,909,336

#### Debt Service Reserve (DSR) Funds Excluded from Portfolio Percentages:
- Agency Securities and Money Market Fund - Series 2004A COPs: 38,946,844
- FSA - Reserve (GIC) Series 2002A COPs: 18,385,750
- Trinity Plus - Reserve (GIC) Series 1998A COPs: 12,240,775

**Subtotal for Debt Service Reserve Funds (unavailable for CIP expenditures):** $69,573,369

**Total Cash and Investments:** $671,927,832

### PORTFOLIO INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>Pooled Funds **</th>
<th>Bond/CP Fund</th>
<th>Debt Service Reserve</th>
<th>Total *</th>
</tr>
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<tbody>
<tr>
<td>Portfolio Yield to Maturity - 365 Days</td>
<td>0.43%</td>
<td>0.52%</td>
<td>2.64%</td>
<td>0.69%</td>
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<tr>
<td>Average Term</td>
<td>657</td>
<td>328</td>
<td>212</td>
<td>488</td>
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<tr>
<td>Average Days to Maturity (730 Days Maximum)</td>
<td>441</td>
<td>104</td>
<td>126</td>
<td>283</td>
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</tbody>
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* "The weighted average days to maturity of the total portfolio shall not exceed 730 days (two years) to maturity" per SDCWA Investment Policy.

** Pooled Funds include Operating, Pay Go, RSF, Equipment and Stored Water funds.
On December 12th, the FOMC maintained the target for the federal funds rate at a range of 0–25 basis points. The next meeting is January 30th.
<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Investment #</th>
<th>Issuer</th>
<th>Average Balance</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P</th>
<th>YTM 365</th>
<th>Days to Maturity</th>
<th>Maturity Date</th>
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<td>36959HSU2</td>
<td>10064</td>
<td>GENERAL ELECTRIC CAPITAL CORP.</td>
<td>08/31/2012</td>
<td>1,200,000.00</td>
<td>1,197,210.00</td>
<td>1,197,210.00</td>
<td>0.31</td>
<td>AA+</td>
<td>0.318</td>
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<td>10,962,190.56</td>
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<td>FEDERAL HOME LOAN BANK</td>
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<td>AA+</td>
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<td>437</td>
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SDCWA - Fiscal Year 2013
Portfolio Management

Page 2

Portfolio Details - Investments
December 31, 2012
CUSIP

Investment #

Issuer

Average
Balance

Purchase
Date

Par Value

Market Value

Book Value

Stated
Rate

S&P

YTM Days to
365 Maturity

Maturity
Date

Federal Agency - Coupon
3133XXYX9
3133XW7L7

4049
4053

FEDERAL HOME LOAN BANK
FEDERAL HOME LOAN BANK

04/06/2011
04/20/2011

3,800,000.00
5,000,000.00

3,831,084.00
5,001,550.00

3,872,420.40
5,078,150.00

1.875
1.500

AA+
AA+

1.000
0.595

171 06/21/2013
15 01/16/2013

3133XWX87
3133XUMR1
3133XGJ96

4058
4076
4078

FEDERAL HOME LOAN BANK
FEDERAL HOME LOAN BANK
FEDERAL HOME LOAN BANK

05/06/2011
10/13/2011
10/31/2011

6,100,000.00
1,260,000.00
5,000,000.00

6,118,361.00
1,321,992.00
5,169,500.00

6,228,405.00
1,348,086.60
5,442,150.00

1.750
3.250
5.250

AA+
AA+
AA+

0.597
0.817
0.485

66 03/08/2013
619 09/12/2014
255 09/13/2013

3128X9D56

10024

FEDERAL HOME LOAN MORTGAGE

01/28/2011

13,000,000.00

13,056,810.00

13,259,350.00

1.720

AA+

0.804

100 04/11/2013

3137EACJ6
3137EACJ6

10025
10026

FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE

02/24/2011
03/30/2011

8,000,000.00
7,000,000.00

8,034,640.00
7,030,310.00

8,120,960.00
7,101,710.00

1.625
1.625

AA+
AA+

0.910
0.905

104 04/15/2013
104 04/15/2013

3137EACJ6
3137EACB3
3137EACX5

10035
10041
10044

FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE

10/12/2011
11/30/2011
03/29/2012

13,000,000.00
8,000,000.00
5,000,000.00

13,056,290.00
8,233,120.00
5,010,600.00

13,243,100.00
8,360,400.00
5,002,700.00

1.625
2.500
0.375

AA+
AA+
AA+

0.380
0.604
0.341

104 04/15/2013
477 04/23/2014
302 10/30/2013

3134G23H3

10055

FEDERAL HOME LOAN MORTGAGE

06/28/2012

10,000,000.00

10,025,800.00

10,021,330.00

0.500

AA+

0.335

287 10/15/2013

3137EADD8
3137EADD8

10057
10058

FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE

07/19/2012
07/25/2012

5,000,000.00
5,000,000.00

5,018,050.00
5,018,050.00

5,015,150.00
5,017,600.00

0.500
0.500

AA+
AA+

0.389
0.370

836 04/17/2015
836 04/17/2015

3137EADD8

10062

5,000,000.00

5,018,050.00

5,006,610.00

0.500

AA+

0.450

836 04/17/2015

10066
10069

FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE

08/16/2012

3137EAAD1
3137EAAD1

09/18/2012
10/17/2012

10,000,000.00
5,000,000.00

11,558,300.00
5,779,150.00

11,671,200.00
5,820,230.00

5.250
5.250

AA+
AA+

0.535
0.518

1,203 04/18/2016
1,203 04/18/2016

3137EACB3

10073

FEDERAL HOME LOAN MORTGAGE

11/08/2012

5,000,000.00

5,150,908.33

5,167,958.33

2.500

AA+

0.262

477 04/23/2014

3137EACB3
3134A4UU6

10076
4043

FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE

12/17/2012
03/29/2011

6,605,000.00
3,000,000.00

6,822,238.45
3,218,880.00

6,831,194.83
3,328,020.00

2.500
5.000

AA+
AA+

0.236
1.580

477 04/23/2014
560 07/15/2014

3128X2TM7

4045

FEDERAL HOME LOAN MORTGAGE

03/31/2011

2,966,000.00

3,119,312.54

3,266,678.25

5.000

AA+

1.341

394 01/30/2014

3134A4TZ7
3134A4SA3

4050
4061

FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE

04/06/2011
05/19/2011

3,500,000.00
3,400,000.00

3,581,445.00
3,405,338.00

3,771,845.00
3,624,978.00

4.500
4.500

AA+
AA+

1.036
0.482

195 07/15/2013
14 01/15/2013

3137EACJ6
3134G2UA8
3134G2WG3

4074
4075
4077

FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE
FEDERAL HOME LOAN MORTGAGE

07/26/2011
10/13/2011
10/13/2011

4,400,000.00
7,600,000.00
2,080,000.00

4,419,052.00
7,690,592.00
2,096,016.00

4,490,732.40
7,638,912.00
2,075,944.00

1.625
1.000
0.750

AA+
AA+
AA+

0.420
0.818
0.817

104 04/15/2013
596 08/20/2014
629 09/22/2014

3135G0BJ1

10049

FEDERAL NATION MORTAGE ASSOC.

04/26/2012

3,000,000.00

3,038,970.00

3,047,850.00

1.125

AA+

0.386

542 06/27/2014

3135G0DW0
31398A4M1

10050
10053

FEDERAL NATION MORTAGE ASSOC.
FEDERAL NATION MORTAGE ASSOC.

04/26/2012
06/25/2012

3,000,000.00
5,000,000.00

3,019,470.00
5,171,250.00

3,013,080.00
5,167,000.00

0.625
1.625

AA+
AA+

0.450
0.612

667 10/30/2014
1,028 10/26/2015

3135G0BA0
3135G0DW0
31398A4M1

10054
10056
10060

FEDERAL NATION MORTAGE ASSOC.
FEDERAL NATION MORTAGE ASSOC.
FEDERAL NATION MORTAGE ASSOC.

06/25/2012
07/12/2012
08/09/2012

5,000,000.00
10,000,000.00
8,000,000.00

5,308,600.00
10,064,900.00
8,274,000.00

5,312,250.00
10,058,800.00
8,288,384.00

2.375
0.625
1.625

AA+
AA+
AA+

0.704
0.368
0.493

1,196 04/11/2016
667 10/30/2014
1,028 10/26/2015

3135G0DW0
31359MUT8
31398AXJ6

10061
10075
4041

FEDERAL NATION MORTAGE ASSOC.
FEDERAL NATION MORTAGE ASSOC.
FEDERAL NATION MORTAGE ASSOC.

08/16/2012
12/17/2012
03/29/2011

5,000,000.00
3,400,000.00
4,000,000.00

5,032,450.00
3,580,554.17
4,124,800.00

5,031,850.00
3,599,322.17
4,125,560.00

0.625
4.125
2.500

AA+
AA+
AA+

0.335
0.236
1.469

667 10/30/2014
469 04/15/2014
499 05/15/2014

31398AJ94

4047

FEDERAL NATION MORTAGE ASSOC.

04/06/2011

5,100,000.00

5,124,735.00

5,186,088.00

1.750

AA+

0.931

126 05/07/2013

31359MUT8
3135G0AK9

4056
4057

FEDERAL NATION MORTAGE ASSOC.
FEDERAL NATION MORTAGE ASSOC.

04/28/2011
05/06/2011

2,000,000.00
3,900,000.00

2,092,000.00
3,903,939.00

2,165,020.94
3,913,143.00

4.125
0.750

AA+
AA+

1.279
0.562

469 04/15/2014
56 02/26/2013

Run Date: 01/02/2013 -Page
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Portfolio CWA2
CC
PM (PRF_PM2) 7.3.0


## SDCWA - Fiscal Year 2013
### Portfolio Management
#### Portfolio Details - Investments
December 31, 2012

<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Investment #</th>
<th>Issuer</th>
<th>Average Balance</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P</th>
<th>YTM</th>
<th>Days to Maturity</th>
<th>Maturity Date</th>
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<td>104</td>
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<td>331,559,994.52</td>
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## Portfolio Details - Cash

### December 31, 2012

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<th>Issuer</th>
<th>Average Balance</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P</th>
<th>YTM</th>
<th>Days to Maturity</th>
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<td>PETTY CASH</td>
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<tr>
<td>CASH02</td>
<td>1000</td>
<td>WELLS FARGO - OPERATING/POOLED</td>
<td>07/01/2012</td>
<td>2,401,605.98</td>
<td>2,401,605.98</td>
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<td>CASH03</td>
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<td>WELLS FARGO - PAYROLL ZBA</td>
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<td>CASH38</td>
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<td>WELLS FARGO - 2010A BONDS</td>
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**Average Balance**: 0.00

**Total Cash and Investments**: 700,255,105.38

**Portfolio Management**: SDCWA - Fiscal Year 2013

**Run Date**: 01/02/2013 - 15:29 PM (PRF_PM2) 7.3.0
### SDCWA - Fiscal Year 2013
#### Portfolio Management
##### Activity Summary
December 2011 through December 2012

<table>
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<th>Month End</th>
<th>Year</th>
<th>Number of Securities</th>
<th>Managed Pool Rate</th>
<th>Number of Investments Purchased</th>
<th>Number of Investments Redeemed</th>
<th>Average Term</th>
<th>Average Days to Maturity</th>
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<tbody>
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<td>401</td>
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Average: 96, 716,151,484.67, 0.697%, 0.707%, 0.985, 3, 4, 438, 240
January 16, 2013

Attention: Administrative and Finance Committee

Authorize the issuance of Senior Lien Water Revenue Refunding Bonds – Series 2013A to refund certain outstanding long-term debt to yield debt service savings. (Action)

Staff recommendation
(1) Adopt a resolution authorizing the issuance of Senior Lien Water Revenue Refunding Bonds, Series 2013A, for the purpose of refunding certain existing long-term debt; and authorize the Director of Finance to utilize a negotiated method of sale.

(2) Approve the forms of financing documents for both refunding bond issuances, including the Preliminary Official Statements for the 2013A Bonds.

Alternative
The Board may choose not to approve the issuance of the Series 2013A and request staff to develop an alternative financing strategy.

Fiscal impact
This action does not increase the amount of debt currently outstanding. Funds for the payment of debt service on the refunding bonds will be included in the General Manager’s Recommended, multi-year budget for FYs 2014 and 2015. Interest rates at the time of issuance will determine the level of cash flow and present value cost savings realized by the Series 2013A Bonds. The recommended action will impact the Customer Service, Storage, Supply, Treatment and Transportation rate categories and the Infrastructure Access Charge.

Background
As described in the Long-Range Financing Plan, the Water Authority funds its Capital Improvement Program (CIP) with a combination of long-term fixed rate debt, variable rate debt and available cash. As of June 30, 2012, outstanding debt consists of $1.93 billion in long-term debt (Certificates of Participation and Revenue Bonds), $360 million in variable rate debt (Tax-Exempt Commercial Paper (TECP)), and $86.6 million in subordinate medium term notes.

Over the last two years, the Water Authority has worked hard to take advantage of the historically low interest rate environment. This has included executing two long-term debt refundings that yielded a total savings of $18.7M dollars in debt service on a present value basis. In addition, the short-term debt portfolio was restructured to take advantage of low short term rates and lower liquidity facility costs associated with the TECP program.

Previous Board Action
March 24, 2011, the Board approved the recommended variable rate debt management strategy, the selection of three liquidity facility providers and amendments to the BLB Liquidity Facility Agreement.
June 23, 2011, the Board approved the issuance of Senior Lien Revenue Refunding Bonds Series 2011A to refund certain maturities of outstanding Senior Lien debt (Series 2002A).

August 25, 2011, the Board approved the issuance of Senior Lien Revenue Refunding Bonds Series 2011B to refund certain maturities of outstanding Senior Lien debt (Series 2002A and Series 2004A).

Discussion
Municipal interest rates and interest rates in general continue to make new lows. This persistent low interest rate environment continues to provide opportunities to reduce the Water Authority’s cost of funds. At this time, there is opportunity to advance refund a portion of the Water Revenue Certificates of Participation, Series 2004A.

2013 Water Revenue Refunding Bonds (Series 2013A)
On September 1, 2004, the Water Authority issued $425 million of Water Revenue Certificates of Participation, Series 2004A. As of June 1, 2012, $388.7 million of the original principal amount remains outstanding. Based on the current market rates, the Water Authority can recognize significant present value savings from refunding approximately $345 million of the Series 2004A certificates. Refunding the 5/1/2014 through 5/1/2034 maturities currently generates present value savings of approximately $48.8 million, or 14.1 percent of refunded par on a pre-transferred proceeds-adjusted basis. On an annual basis the refunding is expected to save the Water Authority between $6.6 million and $2.8 million per year through 2034, based on the current selection of refunded maturities.

Method of Sale
Because of the recent high level of volatility in the capital markets and the necessity to move expeditiously, staff is recommending that a negotiated method of sale be used for the Series 2013A Bonds. A Request for Proposals has been issued to the Water Authority’s pre-approved underwriter pool for underwriting services. The underwriting team will be selected based upon the responses.

The Water Authority has issued a Request for Qualifications (RFQ) to create a new pre-qualified underwriting pool for a three year term. Since that process will not be completed until late April, the new underwriter pool will be utilized for debt issuances occurring after the Series 2004A refunding.

Maximum Authorized Issuance Amount
The maximum size of the refunding is $400 million, which is the not-to-exceed amount specified in the authorizing resolution (Attachment A). The maximum amount is set based upon the potential for changes in the interest rates to increase the number of certificates eligible for refunding under the Policy.

Costs of Issuance
Costs of issuance includes the underwriters’ discount, professional fees for bond counsel and financial advisors, and other costs such as credit rating agency charges, printer charges and the cost of pre-sale marketing such as an internet road show and one-on-one investor meetings. The cost of issuance is estimated to be approximately $645,440, which excludes underwriter fees. The
underwriter fees will be negotiable as we draw nearer to the bond sale. The cost of issuance will be funded out of refunding bond proceeds.

**Next Steps**

**Pre-Sale Marketing**

Effective pre-marketing can increase demand for the bonds and help achieve the lowest possible interest rates. Because of the nuances associated with the Series 2013A Bonds, the underwriting team will be tapping into its large network of both institutional and retail investors. Each firm will market the issue to its respective investor bases, with the goal of maximizing the demand for the bonds. In accordance with the Investor Relations Marketing Plan provided to the Board, the issuance schedule includes a comprehensive pre-sale marketing effort. A formal electronic investor road show is expected as well as Q&A calls with investors, if requested. The Water Authority’s strong credit is expected to attract a range of institutional and retail investors.

**Credit Ratings**

The Water Authority will be seeking ratings for both of the transactions. The Water Authority’s current senior lien ratings are ratings are AA+/Aa2/AA+ from Standard and Poor’s, Moody’s and Fitch, respectively. These ratings are expected to be affirmed for this transaction.

**Timing of Sale and Pricing**

During the actual bond pricings, the Water Authority will work very closely with its financial advisors to assure that they obtain the most favorable pricing terms from the underwriters given prevailing market conditions. One week prior to pricing, through the pre-marketing period and up until the end of pricing, the financial advisors will conduct independent research to ensure the Water Authority achieves the most favorable pricing terms. Comparable transactions, market dynamics, conversations with underwriters and investors, and secondary market trading information will provide the financial advisors with the relevant information to give the Water Authority a strong recommendation as to suggested pricing levels. Based upon the current schedule, the pricing and sale of the Series 2013A Bonds will occur in early February.

**Documents to be Approved**

Issuance of the 2013A refunding bonds requires Board approval of various resolutions and documents described below. The Preliminary Official Statements and authorizing resolutions are provided as attachments to this memorandum. Other documents are on file with the Clerk of the Board for review.

- **Authorizing Resolutions (Attachment A)** - Approves the 2013A Bond issuance subject to certain conditions, approves the form of the documents discussed below, and delegates to Water Authority officers the authority to finalize, execute and deliver the documents and to do any and all things necessary to complete the transaction.

- **Preliminary Official Statements (Attachment B)** - As the primary disclosure documents for the transactions, the POSs contain information necessary for investors to make informed buying decisions regarding the Series 2013A Bonds. It contains information on the debt issue, Water Authority water supplies, operations, CIP, finances, and the regional economy.
Other Financing Documents (On file with the Clerk of the Board):

- The Indentures provide for the issuance of the Series 2013A Bonds.
- The Continuing Disclosure Agreements prescribe the ongoing information disclosure responsibilities of the Water Authority.
- The Escrow Agreement provides for an escrow to refund currently outstanding Water Authority debt.
- The Contracts of Purchase provide for the sale of the 2013A Bonds.

Summary
Approval of the recommended actions position the Water Authority staff and its financing team to move forward with the issuance of the Series 2013A Bonds. After the Bonds are priced and issued, staff will report back to the Board with results at the next scheduled meeting.

Prepared by: David Shank, Financial Planning Manager
Reviewed by: Tracy M. McCraner, Director of Finance
Approved by: Sandra L. Kerl, Deputy General Manager

Attachment A – Authorizing Resolution for the Water Revenue Refunding Bonds, Series 2013A
Attachment B – Form of Preliminary Official Statement – Water Revenue Refunding Bonds, Series 2013A
RESOLUTION NO. 2013-___

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN DIEGO COUNTY WATER AUTHORITY AUTHORIZING THE ISSUANCE OF WATER REVENUE REFUNDING BONDS, THE EXECUTION AND DELIVERY OF AN INDENTURE, AN ESCROW AGREEMENT, A CONTINUING DISCLOSURE AGREEMENT AND AN OFFICIAL STATEMENT, APPROVING THE DISTRIBUTION OF A PRELIMINARY OFFICIAL STATEMENT AND AUTHORIZING THE NEGOTIATED SALE OF SUCH BONDS, AND RELATED ACTIONS

WHEREAS, the San Diego County Water Authority, a county water authority duly organized and existing under and pursuant to the Constitution and laws of the State of California (the “Water Authority”), is authorized under provisions of the Constitution and laws of the State of California, and in accordance therewith, to purchase real and personal property as the Water Authority may determine to be necessary and proper, to make installment sale payments therefor and to refund its installment sale payment obligation through the issuance of refunding revenue bonds; and

WHEREAS, the Board of Directors of the Water Authority (the “Board”) adopted, on May 11, 1989 and amended on December 11, 1997 and December 17, 2009, Resolution No. 89-21 of the Water Authority providing for the allocation of water system revenues and establishing covenants to secure the payment of obligations payable from the net water revenues (the “General Resolution”); and

WHEREAS, the Water Authority has entered into that certain 2004 Installment Sale Agreement, dated as of September 1, 2004 (the “2004 Installment Sale Agreement”), with the San Diego County Water Authority Financing Corporation, and the Water Authority may now be able to achieve significant debt service savings through a refunding of a portion of the installment sale payments payable by the Water Authority under the 2004 Installment Sale Agreement (the “2004 Installment Sale Payments”); and

WHEREAS, the Water Authority has determined to refund a portion of the outstanding 2004 Installment Sale Payments through the issuance and sale of water revenue refunding bonds to be designated “San Diego County Water Authority Water Revenue Refunding Bonds, Series 2013A” (the “Bonds”); and

WHEREAS, there have been presented to this meeting and placed on file with the Clerk of the Board of the Water Authority the following documents:

(1) A form of indenture (the “Form of Indenture”);

(2) A form of escrow agreement (the “Form of Escrow Agreement”);
(3) A form of continuing disclosure agreement (the “Form of Continuing Disclosure Agreement”);

(4) A form of official statement (the “Form of Official Statement”); and

(5) A form of contract of purchase (the “Form of Contract of Purchase”).

WHEREAS, all acts, conditions and things required by the Constitution and laws of the State of California to exist, to have happened and to have been performed precedent to and in connection with the making of the agreements and the consummation of the financing authorized by this resolution do exist, have happened and have been performed in regular and due time, form and manner, and the Water Authority is duly authorized and empowered, pursuant to each and every requirement of law, to consummate such financing as provided in this resolution.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE SAN DIEGO COUNTY WATER AUTHORITY RESOLVES AS FOLLOWS:

Section 1. The statements, findings, and determinations set forth above and in the preambles of the documents approved by this resolution are true and correct.

Section 2. Subject to Section 9 of this resolution, the issuance of the Bonds for the purpose of refunding 2004 Installment Sale Payments, including funding costs of issuance and related fees and expenses, is hereby approved.

Section 3. The Form of Indenture is hereby approved. Subject to Section 9 of this resolution, the Chair of this Board, the General Manager of the Water Authority and the Director of Finance/Treasurer of the Water Authority (each, an “Authorized Officer”) are each, acting individually, hereby authorized and directed, on behalf of the Water Authority, to execute and deliver an Indenture in substantially approved form, with such changes, as the Authorized Officer executing such document may, with the concurrence of the General Counsel of the Water Authority, require or approve, such approval to be conclusively evidenced by the execution and delivery thereof.

Section 4. The Form of Escrow Agreement is hereby approved. Subject to Section 9 of this resolution, the Authorized Officers are each, acting individually, hereby authorized and directed, for and in the name and on behalf of the Water Authority, to execute and deliver an Escrow Agreement in substantially the approved form, with such changes as the Authorized Officer executing such documents may, with the concurrence of the General Counsel of the Water Authority, require or approve, such approval to be conclusively evidenced by the execution and delivery thereof.

Section 5. The Form of Continuing Disclosure Agreement is hereby approved. Subject to Section 9 of this resolution, the Authorized Officers are each, acting individually, hereby authorized and directed, on behalf of the Water Authority, to execute and deliver a Continuing Disclosure Agreement in substantially the approved form, with such changes therein as the Authorized Officer executing such document may, with the concurrence
of the General Counsel of the Water Authority, require or approve, such approval to be conclusively evidenced by the execution and delivery thereof.

Section 6. The Form of Official Statement is hereby approved. The Authorized Officers are each, acting individually, hereby authorized and directed, on behalf of the Water Authority, and with the concurrence of the General Counsel of the Water Authority, to approve the distribution of a Preliminary Official Statement in substantially such form and to certify that such Preliminary Official Statement is, as of its date, “deemed final” by the Water Authority for purposes of Rule 15c2-12 of the Securities and Exchange Commission. The Authorized Officers are hereby authorized and directed, on behalf of the Water Authority, to cause to be prepared and to execute and deliver to the purchasers of the Bonds an Official Statement for the Bonds in substantially the form of the Preliminary Official Statement, with such changes as such officers may, with the concurrence of the General Counsel of the Water Authority, require or approve, such approval to be conclusively evidenced by the execution and delivery thereof, to authorize the distribution of said Official Statement and to certify that said Official Statement is, as of its date, “final and complete” for purposes of Rule 15c2-12 of the Securities and Exchange Commission.

Section 7. The Secretary of the Board of Directors of the Water Authority or the Clerk of this Board are hereby authorized and directed to attest the signatures of such Authorized Officers as may be required or appropriate in connection with the issuance of the Bonds and the execution and delivery of the Indenture, the Escrow Agreement and the Continuing Disclosure Agreement.

Section 8. The sale of the Bonds by negotiated sale is hereby authorized. The Form of Contract of Purchase is hereby approved. Subject to Section 9 of this resolution, the Authorized Officers are each, acting individually, hereby authorized, for and in the name and on behalf of the Water Authority, to execute and deliver to such underwriters as shall be designated by the Director of Finance/Treasurer of the Water Authority from the Water Authority’s approved underwriter pool a Contract of Purchase in substantially the approved form, with such changes as the Authorized Officer executing such document may, with the concurrence of the General Counsel of the Water Authority, require or approve, such approval to be conclusively evidenced by the execution and delivery thereof.

Section 9. The authorization of the issuance of the Bonds and the issuance of the Bonds and the execution and delivery of the Indenture, the Escrow Agreement, the Continuing Disclosure Agreement and the Contract of Purchase, as set forth in Sections 2, 3, 4, 5 and 8 of this resolution, is subject to the following conditions precedent:

(1) The Bonds shall have a final maturity date not later than May 1, 2034;

(2) The Bonds shall be issued in an aggregate principal amount not to exceed $400,000,000;

(3) The underwriters’ discount shall not exceed .50% of the principal amount of the Bonds; and
(4) The net debt service savings with respect to any 2004 Installment Sale Payments to be refunded realized by the Water Authority on a present value basis shall be consistent with the Water Authority’s refunding criteria contained in the Water Authority’s debt management policy (including any determination by the Director of Finance/Treasurer to include individual refunding candidates that are above or below the target savings specified in the refunding criteria in order to optimize policy and/or financial objectives) as determined by the Authorized Officer authorizing the sale of the Bonds.

Section 10. The particular 2004 Installment Sale Payments to be refunded shall be as determined to be in the best interest of the Water Authority by the officer or officers of the Water Authority executing and delivering the Indenture, such determination to be conclusively evidenced by the execution delivery of the Indenture.

Section 11. The Authorized Officers are hereby authorized and directed, jointly and severally, to do any and all things and to execute and deliver any and all documents which they may deem necessary or advisable in order to consummate the sale and issuance of the Bonds and otherwise to carry out, give effect to and comply with the terms and intent of this resolution, the Indenture, the Escrow Agreement, the Continuing Disclosure Agreement and the Contract of Purchase. Such actions heretofore taken by such Authorized Officers are hereby ratified, confirmed, and approved.

Section 12. The authority of the Authorized Officers and the General Counsel of the Water Authority, Secretary of the Water Authority and Clerk of this Board under this resolution may be delegated as provided in the Administrative Code of the Water Authority.
Section 13. This resolution shall take effect immediately upon its passage.

PASSED, APPROVED AND ADOPTED, this 24th day of January, 2013.

AYES: Unless noted below all Directors voted aye.

NOES:

ABSTAIN:

ABSENT:

________________________, Chair

________________________, Secretary

I, Doria F. Lore, Clerk of the Board of the San Diego County Water Authority, certify that the vote shown above is correct and this Resolution No. 2013-____ was duly adopted at the meeting of the Board of Directors on the date stated above.

________________________
Doria F. Lore, Clerk of the Board
PRELIMINARY OFFICIAL STATEMENT DATED FEBRUARY __, 2013

NEW ISSUE – FULL BOOK-ENTRY

[Symbols and logos]

Ratings:

S&P: “___”
Moody’s: “___”
Fitch: “___”

See RATINGS.

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Water Authority, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2013A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from the State of California personal income taxes. In the further opinion of Bond Counsel, interest on the 2013A Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Bond Counsel observes that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the accrual or receipt of interest on, the 2013A Bonds. See TAX MATTERS.

[Water Authority Logo] $_______________ *
San Diego County Water Authority
Water Revenue Refunding Bonds,
Series 2013A

Dated: Date of Delivery Due: As shown below

The San Diego County Water Authority Water Revenue Refunding Bonds, Series 2013A (the “2013A Bonds”), will be issued pursuant to a Indenture, dated as of February 1, 2013 (the “Indenture”), by and between the San Diego County Water Authority (the “Water Authority”) and U.S. Bank National Association, as trustee (the “Trustee”). The 2013A Bonds will be issued in denominations of $5,000 or any integral multiple thereof and will mature on the dates and in the amounts set forth below. Interest on the 2013A Bonds is payable semiannually on May 1 and November 1, commencing ______________ 1, 2013.

The 2013A Bonds will be issued as fully registered bonds and, when delivered, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository of the 2013A Bonds. Individual purchases of the 2013A Bonds will be made in book-entry form only. So long as the 2013A Bonds are registered in the name of Cede & Co., payment of the principal of and interest on the 2013A Bonds will be payable to DTC or its nominee. DTC in turn is obligated to remit such payments to DTC Participants for subsequent disbursement to the beneficial owners of the 2013A Bonds.

The 2013A Bonds are being issued by the Water Authority to refinance a portion of the design, acquisition and construction of various capital projects of its Capital Improvement Program by refunding a portion of the installment sale payments evidenced by the Water Authority’s outstanding Water Revenue Certificates of Participation, Series 2004A.

The 2013A Bonds are subject to optional and mandatory sinking fund redemption as described herein.

The 2013A Bonds are secured by a pledge of Net Water Revenues (as defined herein).


MATURITY SCHEDULE*

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This cover page contains information for general reference only. It is not intended to be a summary of this issue. Potential purchasers are advised to read the entire Official Statement to obtain information essential to making an informed investment decision.

The 2013A Bonds are offered when, as and if issued and accepted by the Underwriters, subject to the approval of legality by Orrick, Herrington & Sutcliffe LLP, San Francisco, California, and to certain other conditions. Certain matters will be passed upon for the Water Authority by Daniel S. Hentschke, its General Counsel. Orrick, Herrington & Sutcliffe LLP, San Francisco, California, is also acting as Disclosure Counsel. Certain matters will be passed upon for the Underwriters by [______]. It is expected that the 2013A Bonds in book-entry form will be available for delivery through the facilities of DTC on or about February ___, 2013

[______________]

February ___, 2013

† Copyright 2013, American Bankers Association. CUSIP data provided herein by Standard and Poor’s, CUSIP Service Bureau, a division of The McGraw-Hill Companies Inc. This data is not intended to create or maintain a database of CUSIP descriptions or numbers and is not intended to create and does not serve in any way as a substitute for the CUSIP Service. CUSIP numbers are provided only for the convenience of the reader. Neither the Water Authority nor the Underwriters take any responsibility for the accuracy of such CUSIP numbers.

* Preliminary, subject to change
SAN DIEGO COUNTY WATER AUTHORITY  
4677 Overland Avenue  
San Diego, California 92123  
(858) 522-6600  
Internet: http://www.sdcwa.org  

BOARD OF DIRECTORS

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<th>Secretary</th>
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Chair  
THOMAS V. WORNHAM

REPRESENTATIVES OF THE MEMBER AGENCIES

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| Del Mar | Carlsbad Municipal Water District  
HERSHELL PRICE  
FARRAH G. DOUGLAS  
KEITH LEWINER |
| Escondido | Rincon del Diablo Municipal Water District  
Marilyn J. DAILEY  
FARRAH G. DOUGLAS  
KEITH LEWINER [vacant] |
| National City | Fallbrook Public Utility District  
RON MORRISON  
BRIAN BRADY |
| Oceanside | Helix Water District  
BRIAN BOYLE  
JOHN B. LINDEN  
DEANA VERBEKE |
| Poway | Lakeside Water District  
MARK WESTON  
FRANK HILLIKER |
| San Diego | Olivenhain Municipal Water District  
ROGER BAILEY  
JIM MADAFFER  
VINCENT MUDD  
JAVIER SAUNDERS  
ELSA SAXOD  
FERN STEINER  
YEN C. TU  
BARBARA WIGHT  
KENNETH WILLIAMS  
THOMAS V. WORNHAM  
BOB TOPOLOVAC |
|  | Otay Water District  
GARY CROUCHER  
MARK W. WATTON |
|  | Padre Dam Municipal Water District  
DOUG WILSON |
|  | Rainbow Municipal Water District  
DENNIS SANFORD |
|  | Ramona Municipal Water District  
DAVID BARNUM |
|  | Valley Center Municipal Water District  
MARTY MILLER |
|  | Vista Irrigation District  
[vacant] |
|  | Yuima Municipal Water District  
[vacant] |
SAN DIEGO COUNTY WATER AUTHORITY

STAFF

MAUREEN A. STAPLETON
    General Manager

DANIEL S. HENTSCHKE
    General Counsel

FRANK BELOCK, JR.
    Deputy General Manager

SANDRA L. KERL
    Deputy General Manager

DENNIS A. CUSHMAN
    Assistant General Manager

TRACY M. McCRANER
    Director of Finance/Treasurer

WILLIAM J. ROSE
    Director of Engineering

DAVID G. SHANK
    Financial Planning Manager

FINANCIAL ADVISORS
    Montague DeRose and Associates, LLC

INDEPENDENT AUDITORS
    Macias, Gini & O’Connell, LLP
    Certified Public Accountants

BOND COUNSEL AND
    DISCLOSURE COUNSEL
    Orrick, Herrington & Sutcliffe LLP

TRUSTEE
    U.S. Bank National Association

VERIFICATION AGENT
    [__________________]

No dealer, broker, salesperson or other person has been authorized by the Underwriters, the Water Authority or the Trustee to give any information or to make any representations other than those contained herein and, if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing.

This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of 2013A Bonds by a person in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction. This Official Statement is not to be construed as a contract with the purchasers or any of the owners of 2013A Bonds. Any statement made in this Official Statement involving estimates, forecasts or matters of opinion, whether or not expressly so stated, are intended solely as such and not as representations of fact. The information set forth herein has been furnished by the Water Authority and other sources that are believed to be reliable, but is not guaranteed as to accuracy or completeness, and is not to be construed as representations by the Underwriters. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Water Authority since the date hereof.

CERTAIN STATEMENTS CONTAINED IN THIS OFFICIAL STATEMENT REFLECT NOT HISTORICAL FACTS BUT FORECASTS AND “FORWARD-LOOKING STATEMENTS.” NO ASSURANCE CAN BE GIVEN THAT THE FUTURE RESULTS DISCUSSED HEREIN WILL BE ACHIEVED, AND ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THE FORECASTS DESCRIBED HEREIN. IN THIS RESPECT, THE WORDS “ESTIMATE”, “PROJECT”, “ANTICIPATE”, “EXPECT”, “INTEND”, “BELIEVE” AND SIMILAR EXPRESSIONS ARE INTENDED TO IDENTIFY FORWARD-LOOKING STATEMENTS. ALL PROJECTIONS, FORECASTS, ASSUMPTIONS, EXPRESSIONS OF OPINIONS, ESTIMATES AND OTHER FORWARD-LOOKING STATEMENTS ARE EXPRESSLY QUALIFIED IN THEIR ENTIRETY BY THE CAUTIONARY STATEMENTS SET FORTH IN THIS OFFICIAL STATEMENT.
The Underwriters have provided the following for inclusion in the Official Statement in connection with the offering of the 2013A Bonds: The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the federal securities laws, as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

THE PURCHASERS MAY OVERALLOT OR EFFECT TRANSACTIONS THAT MAY STABILIZE OR MAINTAIN THE MARKET PRICE OF THE 2013A BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

While the Water Authority maintains a website for various purposes, none of the information on the Water Authority’s website is intended to assist investors in making an investment decision or to provide any continuing information with respect to the 2013A Bonds.
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OFFICIAL STATEMENT

San Diego County Water Authority
Water Revenue Refunding Bonds,
Series 2013A

INTRODUCTION

This Official Statement, including the cover page and Appendices hereto, is provided to furnish certain information in connection with the offering of San Diego County Water Authority Water Revenue Refunding Bonds, Series 2013A (the “2013A Bonds”), in the aggregate principal amount of $_______________*.

The 2013A Bonds are secured by a pledge of Net Water Revenues (defined below). Payment of the 2013A Bonds from Net Water Revenues is on a parity with the payment of the Contracts (defined below) presently outstanding or hereafter incurred by the Water Authority in accordance with the General Resolution (defined below).

The 2013A Bonds constitute limited obligations of the Water Authority, payable solely from Net Water Revenues, and neither the full faith and credit nor the taxing power of the Water Authority, the State of California or any of its political subdivisions is pledged for the payment thereof.

The 2013A Bonds are being issued by the Water Authority to refinance a portion of the design, acquisition and construction of various capital projects of its Capital Improvement Program by refunding a portion of the Water Authority’s obligations under the 2004 Installment Sale Agreement (defined below). See THE CAPITAL IMPROVEMENT PROGRAM and PLAN OF REFUNDING.

The 2013A Bonds are being issued pursuant to the County Water Authority Act of the State of California and all laws amendatory thereof or supplemental thereto, including Articles 10 and 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the Government Code of the State of California (collectively, the “Act”) and an Indenture, dated as of February 1, 2013 (the “Indenture”), between the Water Authority and U.S. Bank National Association as trustee (the “Trustee”).

Brief descriptions of the 2013A Bonds, the security and sources of payment for the 2013A Bonds and the Water Authority and its Capital Improvement Program are provided herein. Such descriptions do not purport to be comprehensive or definitive. Definitions of certain capitalized terms used herein may be found in APPENDIX C - SUMMARY OF PRINCIPAL LEGAL DOCUMENTS - Certain Definitions. All references made to various documents herein are qualified in their entirety by reference to the forms thereof, all of which are available for inspection at the office of the Water Authority’s Clerk of the Board of Directors.

WATER AUTHORITY DEBT

The Water Authority may borrow money and incur indebtedness and may issue bonds or other evidences of indebtedness, provided that the Water Authority may not incur indebtedness in excess of 15 percent of the assessed valuation of the taxable property within the Water Authority’s service area. Revenue bonds of the Water Authority, other than revenue refunding bonds, must be authorized by a majority vote of the qualified electors of the Water Authority, and general obligation bonds must be authorized by a two-thirds majority vote of the qualified electors of the Water Authority. The Water Authority has no revenue bonds (other than revenue refunding bonds) or general obligation bonds outstanding. The Water Authority may purchase real or personal property (through installment sale agreements) and may also incur indebtedness by contract. Installment sale agreements are not limited in principal amount and contract indebtedness is limited in aggregate amount to 1/10 of 1 percent of the assessed value of property taxable for Water Authority purposes. As of June 30, 2012, 1/10 of 1 percent of the assessed value of

* Preliminary, subject to change.
property taxable for Water Authority purposes was approximately $369 million. As of January 1, 2013 the Water Authority had contract indebtedness in an aggregate principal amount of $183,875,000 outstanding. Any proposal to incur indebtedness by contract in excess of said 1/10 of 1 percent limit, and any proposal to purchase, lease or otherwise acquire rights, privileges or services in excess of 40 years requires majority approval of the qualified electors of the Water Authority. The Water Authority may also issue and sell, without voter approval, revenue refunding bonds to refund its outstanding indebtedness. The Water Authority may also issue and sell, without voter approval, commercial paper in the form of short-term revenue certificates for any Water Authority purpose, and may arrange for bank lines of credit or letters of credit in connection therewith. All of the Water Authority’s payment obligations with respect to all of the Water Authority’s outstanding installment sale agreements and contracts of indebtedness are evidenced by certificates of participation or secure revenue bonds issued by the San Diego County Water Authority Financing Agency.

The Water Authority’s obligation to make installment payments under the Contracts are evidenced by the following certificates of participation or secure the following bonds issued by the San Diego County Water Authority Financing Agency and the Water Authority has issued the following revenue refunding bonds:

<table>
<thead>
<tr>
<th>Water Revenue Certificates of Participation:</th>
<th>Initial Principal Amount</th>
<th>Principal Amount Outstanding as of June 30, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Revenue Certificates of Participation, Series 1998A (the “1998A Certificates”)</td>
<td>$180,000,000</td>
<td>$11,685,000</td>
</tr>
<tr>
<td>Water Revenue Certificates of Participation, Series 2002A (the “2002A Certificates”)</td>
<td>300,000,000</td>
<td>17,510,000</td>
</tr>
<tr>
<td>Water Revenue Certificates of Participation, Series 2004A (the “2004A Certificates”)</td>
<td>425,000,000</td>
<td>388,710,000†</td>
</tr>
<tr>
<td>Water Revenue Refunding Certificates of Participation, Series 2005A (the “2005A Certificates”)</td>
<td>107,455,000</td>
<td>95,730,000</td>
</tr>
<tr>
<td>Water Revenue Certificates of Participation, Series 2008A (the “2008A Certificates”)</td>
<td>558,015,000</td>
<td>556,150,000</td>
</tr>
</tbody>
</table>

San Diego County Water Authority Financing Agency Bonds:

| Water Revenue Bonds, Series 2010A (the “2010A Bonds”) | 98,495,000              | 98,495,000                                   |
| Water Revenue Bonds, Series 2010B (Taxable Build America Bonds) (the “2010B Bonds”) | 526,135,000              | 526,135,000                                   |

Water Revenue Refunding Bonds:

| Water Revenue Refunding Bonds, Series 2011A | 139,945,000              | 139,945,000                                   |
| Water Revenue Refunding Bonds, Series 2011B | 94,540,000               | 94,540,000                                   |

$2,429,585,000 $1,928,900,000

The Contracts, the 2011A Bonds and the 2011B Bonds are all fixed interest rate obligations and all are payable from Net Water Revenues on a parity with payments on the 2013A Bonds. The Water Authority has no indebtedness outstanding which is payable from Net Water Revenues senior to payments on the Contracts and the Bonds, and the General Resolution does not allow the Water Authority to incur indebtedness payable from Net Water Revenues senior to payments on the Contracts and the Bonds. The Water Authority may issue revenue refunding bonds or enter into future installment sale agreements or contract indebtedness that will be payable from Net Water Revenues on a parity with the Contracts and the Bonds, subject to the requirements summarized in this section and in SECURITY AND SOURCES OF PAYMENT – Additional Parity Obligations.

Debt service reserve funds were created in connection with the execution and delivery of the 1998A Certificates, the 2002A Certificates, the 2004A Certificates, the 2005A Certificates and the 2008A Certificates. Amounts in such debt service reserve funds are not available to secure the 2013A Bonds. No debt service reserve fund will be created to secure the 2013A Bonds.

In November 1995, the Water Authority established a commercial paper program in order to finance additional capital facilities. Commercial paper notes issued under the program (the “Commercial Paper Notes”) are authorized to be issued in the aggregate principal amount of $460,000,000 outstanding from time to time.

† $______________ aggregate principal amount of the 2004A Certificates is being refunded with proceeds of the 2013A Bonds. See PLAN OF REFUNDING.
Commercial Paper Notes in the aggregate principal amount of $360,000,000 are currently outstanding. The San Diego County Water Authority Subordinate Lien Water Revenue Refunding Bonds, Series 2011S-1 (the “2011S-1 Bonds”), were issued on July 21, 2011 in the aggregate principal amount of $86,630,000, all of which was outstanding as of June 30, 2012. The Commercial Paper Notes, certain payments to the banks providing liquidity support for the Commercial Paper Notes, and the 2011S-1 Bonds are payable from Net Water Revenues on a subordinate basis to the 2013A Bonds and are referred to herein, together with any future Water Authority obligations issued on a parity therewith, as the “Subordinate Obligations.”

On November 29, 2012, the Water Authority Board approved the implementation and financing of a desalination project to be located in Carlsbad, California, including a desalination plant and 10-mile pipeline to deliver desalinated water from the plant to the Water Authority’s water system. The project has been financed in part with proceeds of two series of bonds, $530,345,000 aggregate principal amount of California Pollution Control Financing Authority Water Furnishing Revenue Bonds, Series 2012 (Poseidon Resources (Channelside) LP Desalination Project) (the “Series 2012 Plant Bonds”), and $203,215,000 aggregate principal amount of California Pollution Control Financing Authority Water Furnishing Revenue Bonds, Series 2012 (San Diego County Water Authority Desalination Project Pipeline) (the “Series 2012 Pipeline Bonds” and, together with the Series 2012 Plant Bonds, the “Desalination Bonds”), issued on December 24, 2012 by the California Pollution Control Financing Authority (the “CPCFA”). In connection with the desalination project, the Water Authority entered into a Carlsbad Seawater Desalination Project Water Purchase Agreement, dated December 20, 2012 (the “Desalination Water Purchase Agreement”), by and between the Water Authority and Poseidon Resources (Channelside) LP (“Poseidon”), and a Pipeline Installment Sale and Assignment Agreement (the “Desalination Installment Sale Agreement”), dated December 24, 2012, by and between the Water Authority and the San Diego County Water Authority Financing Agency. It is expected that payments made by the Water Authority under these agreements will constitute a substantial portion of the amounts ultimately applied to pay debt service payments on the Desalination Bonds as described under FINANCIAL OPERATIONS – Financial Commitments Related to the Carlsbad Project. The Water Authority’s obligations to make payments under the Desalination Water Purchase Agreement and the Desalination Installment Sale Agreement are, however, contingent upon the desalination plant achieving commercial operation and ongoing delivery of product water to the Water Authority in the amounts set forth in the Desalination Water Purchase Agreement. Purchases of water pursuant to the Desalination Water Purchase Agreement will constitute Operation and Maintenance Costs under the General Resolution, while installment payments to be made pursuant to the Desalination Installment Sale Agreement are obligations payable from amounts constituting Net Water Revenues on deposit in the General Reserve Fund established under the General Resolution, subordinate to the pledge of Net Water Revenues for the payment of Bonds, Contracts, Reimbursement Obligations and Subordinate Obligations. See SECURITY AND SOURCES OF PAYMENT.

A portion of the proceeds of the 2013A Bonds, together with other available monies, will be used, pursuant to an escrow agreement between U.S. Bank National Association (the “Escrow Agent”) and the Water Authority, dated as of February 1, 2013 (the “Escrow Agreement”), to acquire direct obligations of the United States, the principal of and interest on which, when due, will provide monies sufficient to pay the prepayment price of the 2004A Certificates (100% of the principal amount thereof) with certificate payment dates set forth below on and in the amounts set forth below (the “Refunded 2004A Certificates”) on May 1, 2015, and to pay interest evidenced by the Refunded 2004A Certificates to such date of prepayment. Such obligations will be deposited with the Escrow Agent in trust for the payment of interest when due and the prepayment price on the Refunded 2004A Certificates. Upon deposit of such obligations in trust, the Refunded 2004A Certificates will no longer be outstanding under the trust agreement pursuant to which the Refunded 2004A Certificates were executed and delivered.
Refunded 2004A Certificates

<table>
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<tr>
<th>Maturity (May 1)</th>
<th>Partial Principal Component Being Refunded</th>
<th>Refunded Certificates New CUSIP†</th>
<th>Principal Component to Remain Outstanding</th>
<th>Unrefunded Certificates New CUSIP†</th>
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<tr>
<td>$</td>
<td></td>
<td>$</td>
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The balance of the proceeds of the 2013A Bonds, net of Underwriters’ discount, will be used to pay costs of issuance. See SOURCES AND USES OF FUNDS.

The mathematical accuracy of the computations of the adequacy of the maturing principal of and interest earned on the securities held pursuant to the Escrow Agreement to fully provide for all payments enumerated above will be verified upon delivery of the 2013A Bonds by _____________, certified public accountants. See VERIFICATION OF MATHEMATICAL COMPUTATIONS.

THE 2013A BONDS

General

The 2013A Bonds will be issued in the aggregate principal amount of $___________*. The 2013A Bonds will be issued in denominations of $5,000 or any integral multiple thereof, and will be dated to the date of delivery thereof and will mature on May 1 in the years and in the amounts set forth on the cover page hereof. Interest on the 2013A Bonds is payable from their dated date at the rates set forth on the cover page hereof, on May 1 and November 1 of each year, commencing __________ 1, 2013.

The 2013A Bonds, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC,” and, together with any successor securities depository, the “Securities Depository”). DTC will act as Securities Depository for the 2013A Bonds so purchased. Individual purchases of the 2013A Bonds will be made only in book-entry form. Underwriters will not receive physical certificates representing their beneficial ownership interest in the 2013A Bonds. So long as the 2013A Bonds are registered in the name of Cede & Co., payment of the principal of, premium, if any, and interest on the 2013A Bonds will be payable to DTC or its nominee. DTC in turn is obligated to remit such payments to DTC Participants for subsequent disbursement to the Beneficial Owners. See APPENDIX E – BOOK-ENTRY SYSTEM.


Redemption*

Optional Redemption. The 2013A Bonds maturing on or after May 1, ______ shall be subject to redemption prior to their stated maturity date at the option of the Water Authority, from any source of available funds, as a whole or in part on any date on or after __________ 1, ____, at a redemption price equal to the principal amount of such 2013A Bonds called for redemption, together with accrued interest thereon to the date fixed for redemption, without premium.

* Preliminary, subject to change.
† Copyright 2013, American Bankers Association. CUSIP data provided herein by Standard and Poor’s, CUSIP Service Bureau, a division of The McGraw-Hill Companies Inc. This data is not intended to create or maintain a database of CUSIP descriptions or numbers and is not intended to create and does not serve in any way as a substitute for the CUSIP Service. CUSIP numbers are provided only for the convenience of the reader. Neither the Water Authority nor the Purchasers take any responsibility for the accuracy of such CUSIP numbers.
Mandatory Sinking Fund Redemption. The 2013A Bonds maturing on May 1, ____ are subject to redemption prior to their respective stated maturities, on any May 1 on or after May 1, ____, in part by lot, from mandatory sinking account payments at a redemption price equal to the principal amount thereof and interest accrued thereon to the date fixed for redemption, without premium, as set forth below.

<table>
<thead>
<tr>
<th>Sinking Fund Redemption Date (May 1)</th>
<th>Principal Amount</th>
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</tbody>
</table>

† Final Maturity

Partial Redemption. If less than all of the Outstanding 2013A Bonds are to be redeemed at any one time, the Water Authority shall select the maturities of the 2013A Bonds and the principal amount of each such maturity to be redeemed in its sole discretion. If less than all 2013A Bonds maturing by their terms on any one date are to be redeemed at any one time, the Trustee shall select the 2013A Bonds of such maturity to be redeemed in any manner that it deems appropriate and fair and shall promptly notify the Water Authority in writing of the numbers of such 2013A Bonds so selected for redemption. For purposes of such selection, the 2013A Bonds shall be deemed to be composed of $5,000 multiples and any such multiple may be separately redeemed.

Notice, Rescission and Effect of Redemption

Notice of Redemption. Notice of redemption is required to be mailed by first-class mail by the Trustee, not less than 20 nor more than 60 days prior to the redemption date to (i) the respective Owners of the 2013A Bonds designated for redemption at their addresses appearing on the registration books of the Trustee, (ii) the Securities Depositories and (iii) the Municipal Securities Rulemaking Board. Notice of redemption to the Securities Depositories and the Municipal Securities Rulemaking Board is required to be given by registered mail or overnight delivery or facsimile transmission. Each notice of redemption is required to state the date of such notice, the redemption price, the place of redemption (including the name and appropriate address of the Trustee), the CUSIP number of the maturity or maturities, and if less than all of any such maturity is to be redeemed, the distinctive certificate numbers of the 2013A Bonds of such maturity to be redeemed, the redemption price thereof and, in the case of 2013A Bonds to be redeemed in part only, the respective portions of the principal amount thereof to be redeemed. Each such notice is also required to state that on said date there will become due and payable on each of said 2013A Bonds to be redeemed in part only, the specified portion of the principal amount thereof to be redeemed, together with interest accrued thereon to the redemption date, and that from and after such redemption date interest thereon will cease to accrue, and require that the 2013A Bonds be then surrendered at the address of the Trustee specified in the redemption notice.

So long as the 2013A Bonds are held in book-entry only form, notice of redemption will be mailed by the Trustee only to DTC and not to the Beneficial Owners of 2013A Bonds under the DTC book-entry only system. Neither the Water Authority nor the Trustee is responsible for notifying the Beneficial Owners, who are to be notified in accordance with the procedures in effect for the DTC book-entry system. See APPENDIX E – BOOK-ENTRY SYSTEM.

Neither the failure to receive any such notice of redemption nor any defect therein will affect the validity of the proceedings for the redemption of such 2013A Bonds or the cessation of the accrual of interest on the redemption date.

Conditional Notice of Optional Redemption. Any notice of optional redemption of the 2013A Bonds may be conditional and if any condition stated in the notice of redemption shall not have been satisfied on or prior to the redemption date, said notice shall be of no force and effect and the Water Authority shall not be required to redeem such 2013A Bonds and the redemption shall be cancelled and the Trustee shall within a reasonable time thereafter
give notice, to the persons and in the manner in which the notice of redemption was given, that such condition or conditions were not met and that the redemption was cancelled.

Right to Rescind or Cancel Redemption. The Water Authority shall have the right to rescind any optional redemption by written notice of rescission. In addition, any notice of optional redemption shall be cancelled and annulled if for any reason funds are not available on the date fixed for redemption for the payment in full of the 2013A Bonds then called for redemption. Any such rescission or cancellation shall not constitute an Event of Default under the Indenture. The Trustee shall mail notice of rescission or cancellation of such redemption in the same manner as the original notice of redemption was sent.

Effect of Redemption. If notice of redemption has been duly given and money for the payment of the redemption price of the 2013A Bonds called for redemption is held by the Trustee, then on the redemption date designated in such notice the 2013A Bonds so called for redemption shall become due and payable, and from and after the date so designated interest on such 2013A Bonds shall cease to accrue, and the Owners of such 2013A Bonds shall have no rights in respect thereof except to receive payment of the redemption price thereof.

SOURCES AND USES OF FUNDS

The sources and uses of funds in connection with the 2013A Bonds are anticipated to be as follows:

SOURCES:

   Principal Amount of the 2013A Bonds ...........................  $
   [Net] Original Issue [Premium][Discount]............................
   Funds of the Water Authority relating to the
   Refunded 2004A Certificates ........................................

TOTAL ........................................................................  $

USES:

   Deposit to Escrow Fund relating to the
   Refunded 2004A Certificates ...........................................
   Costs of Issuance$1 ......................................................

TOTAL ........................................................................  $


1 Includes Underwriters’ discount, legal fees, financial advisory fees, printing expenses and other costs relating to the issuance and delivery of the 2013A Bonds.

SECURITY AND SOURCES OF PAYMENT

   Capitalized terms used herein and not otherwise defined shall have the meanings set forth in APPENDIX C - SUMMARY OF PRINCIPAL LEGAL DOCUMENTS - Certain Definitions.

General

   The Indenture provides that the 2013A Bonds shall constitute Bonds under the General Resolution secured by a pledge of Net Water Revenues as provided therein. Under the General Resolution, Net Water Revenues are pledged to secure the payment by the Water Authority of all Bond Payments, Installment Payments and Reimbursement Payments relating to Bonds and Contracts and other evidences of indebtedness or obligations payable on a parity therewith, and, subordinate thereto, the payment of all Subordinate Obligations. Obligations that are not Maintenance and Operation Costs, Bond Payments, Installment Payments, Reimbursement Payments or Subordinate Obligations are payable from amounts in the General Reserve Fund described below.
The 2013A Bonds constitute limited obligations of the Water Authority, payable solely from Net Water Revenues, and neither the full faith and credit nor the taxing power of the Water Authority, the State of California or any of its political subdivisions is pledged for the payment thereof.

Payment of the 2013A Bonds from Net Water Revenues is on a parity with the payment of any Contracts presently outstanding or hereafter incurred by the Water Authority in accordance with the General Resolution.

**Pledge of Net Water Revenues**

The Indenture provides that the 2013A Bonds shall constitute Bonds under the General Resolution secured by a pledge of Net Water Revenues as provided therein. The Indenture further provides that the Owners shall be beneficiaries of all of the obligations assumed by the Water Authority and the covenants made by the Water Authority in the General Resolution.

In addition, all amounts (including proceeds of the sale of the 2013A Bonds) held by the Trustee in any fund or account established under the Indenture (other than amounts on deposit in the Rebate Fund) are irrevocably pledged to the payment of the interest on and principal of and redemption premiums, if any, on the 2013A Bonds as provided in the Indenture and shall not be used for any other purpose while any of the 2013A Bonds remain Outstanding; provided, however, that out of such moneys there may be applied such sums for such purposes as are permitted under the Indenture.

**Deposit of Net Water Revenues**

To provide for the payment of the principal of and interest on the 2013A Bonds as the same shall become due and payable, the Water Authority shall, from Net Water Revenues on deposit in the Installment Payment Fund established under the General Resolution on a parity with the payment of all other Bond Payments, Installment Payments and Reimbursement Payments (each as defined in the General Resolution), transfer to the Trustee for deposit in the Debt Service Fund from time to time amounts sufficient, together with other moneys available therefor, for the timely payment of principal of and interest on the 2013A Bonds. Such payment shall be on a parity with the application of Net Water Revenues to the payment of principal and accreted value of, premium, if any, interest on, and any reserve fund requirements for, or other obligations with respect to, any Contracts.

The Water Authority agrees and covenants that on or before the Business Day immediately preceding May 1 and November 1 of each year, beginning __________ 1, 2013, the Water Authority shall, from amounts in the Installment Payment Fund (on a parity with the payment of all other Bond Payments, Installment Payments and Reimbursement Payments), transfer to the Trustee for deposit in the Debt Service Fund, which fund the Trustee shall establish, maintain and hold in trust so long as any Bonds remain outstanding, a sum equal to the amount of interest and principal becoming due on the next succeeding May 1 or November 1, as the case may be; provided, no such transfer need be made if the amount on deposit in the Debt Service Fund is at least equal to the amount of interest and principal becoming due and payable on the Bonds on such May 1 or November 1, as the case may be.

All money on deposit in the Debt Service Fund shall be used and withdrawn by the Trustee solely for the purpose of paying the interest on and principal of the Bonds as such interest and principal become due and payable.

No debt service reserve fund to secure the 2013A Bonds is created under the Indenture.

**Net Water Revenues**

Net Water Revenues, the source of payment for the 2013A Bonds, is defined by the General Resolution to be, for any fiscal year, the Water Revenues during such fiscal year less the Maintenance and Operation Costs during such fiscal year.

Current Water Revenues, Water Revenues. “Water Revenues” is defined under the General Resolution as Current Water Revenues plus amounts transferred to the Water Revenue Fund from the Rate Stabilization Fund less amounts transferred from the Water Revenue Fund to the Rate Stabilization Fund.

Under the General Resolution, “Current Water Revenues” generally include all gross income and revenue received or receivable by the Water Authority from its ownership and operation of the Water System, including...
income derived from water sales, Water Standby Availability Charges, capacity charges, infrastructure access charges, sales of hydroelectric power associated with the Water System and certain investment earnings, but excluding any proceeds of taxes and any refundable deposits made to establish credit and advances or contributions in aid of construction.

Interest Subsidy Payments received by the Water Authority with respect to the San Diego County Water Authority Financing Agency Water Revenue Bonds, Series 2010B, constitute Current Water Revenues. The Water Authority has amended the General Resolution pursuant to Resolution 09-23, adopted on December 17, 2009 (“Resolution No. 09-23”), to provide that Interest Subsidy Payments are treated as a reduction to Debt Service rather than as Current Water Revenues. Such amendment will become effective, however, only if and when requisite approvals for an amendment of the General Resolution have been obtained by the Water Authority. By their purchase of 2013A Bonds, the purchasers of such 2013A Bonds consent to such amendment.

Rate Stabilization Fund. In order to avoid fluctuations in its water rates, the Water Authority may transfer portions of its Current Water Revenues from time to time to the Rate Stabilization Fund, and from time to time transfer moneys from the Rate Stabilization Fund to the Water Revenue Fund. Such transfers from the Rate Stabilization Fund are to be used by the Water Authority solely to pay Maintenance and Operation Costs. It is expected that the amounts to be transferred into and out of the Rate Stabilization Fund will be budgeted by the Water Authority on an annual basis in order to provide sufficient Water Revenues to meet its capital improvement funding objectives and its covenant obligations under the General Resolution. See FINANCIAL OPERATIONS - Financial Management Policies and PROJECTED OPERATING RESULTS – Projected Operating Revenue.

Maintenance and Operation Costs. The Water Authority is required to pay all Maintenance and Operation Costs from the Water Revenue Fund as they become due. Such costs include all costs paid or incurred by the Water Authority for maintaining and operating the Water System, including water purchases, determined in accordance with Generally Accepted Accounting Principles, as more fully set forth in the General Resolution. Maintenance and Operation Costs exclude depreciation, replacement and obsolescence charges or reserves therefor and amortization of intangibles, premiums and discounts, and interest expense. Also excluded are maintenance and operation costs paid from other than Water Revenues, including, without limitation, costs paid from ad valorem property tax revenues.

The Water Authority may enter into contracts or leases with respect to the payment of certain maintenance and operation expenses. However, amounts paid pursuant to any contract or lease longer than five years (an “Obligation”) shall be treated as Maintenance and Operation Costs only if the Water Authority determines at the time it enters into the Obligation that (a) the treatment of payments on such Obligation as Maintenance and Operation Costs will not impair its ability to comply with its rate covenant (hereinafter described) during the succeeding five fiscal years (or during the five years after the commercial operation date of the project being financed with the Obligation, if later), and (b) the properties, services or commodities to be furnished pursuant to the Obligation can be economically and beneficially utilized by the Water Authority. If these criteria cannot be met, amounts due under the Obligation shall be paid out of the Subordinate Obligation Payment Fund or the General Reserve Fund (each hereinafter described).

Net Water Revenues. Net Water Revenues, the source of payment for the 2013A Bonds, is defined by the General Resolution to be, for any fiscal year, the Water Revenues during such fiscal year less the Maintenance and Operation Costs during such fiscal year.

Application of Water Revenues Under the General Resolution

The General Resolution established five special funds which are held by the Water Authority: a Water Revenue Fund; a Rate Stabilization Fund; an Installment Payment Fund; a Subordinate Obligation Payment Fund; and a General Reserve Fund.

Water Revenue Fund. Under the General Resolution, all Current Water Revenues are deposited initially in the Water Revenue Fund. The Water Revenue Fund may also receive transfers from the Rate Stabilization Fund, and the Water Authority may make transfers from the Water Revenue Fund to the Rate Stabilization Fund.
Amounts in the Water Revenue Fund are utilized to pay Maintenance and Operation Costs as they become due and payable. Remaining amounts, constituting Net Water Revenues, are set aside and deposited or transferred by the Water Authority, as the case may be, at the following times in the following order of priority:

(a) **Installment Payment Fund.** On or before the last business day of each month, the Water Authority shall deposit in the Installment Payment Fund a sum equal to the Monthly Accrued Debt Service for such month, plus a sum equal to all Reimbursement Payments then due and payable, provided that no such deposit need be made if amounts on deposit in the Installment Payment Fund equal the amount of Bond Payments or Installment Payments due with respect to all Bonds and Contracts on the next succeeding Interest Payment Date (with respect to interest), Principal Payment Date (with respect to principal) and Accreted Value Payment Date (with respect to Accreted Value) for such Bonds or Contracts, and the Reimbursement Payments then due and payable.

The 2013A Bonds constitute “Bonds” under the General Resolution.

(b) **Bond or Contract Reserve Fund.** On or before the last business day of each month, the Water Authority shall transfer to each trustee for deposit in the applicable Bond or Contract Reserve Fund an amount equal to the amount, if any, required to be deposited therein to build up or replenish such Bond or Contract Reserve Fund as, and to the extent, required by the applicable Contract or Indenture.

No debt service reserve fund will be created to secure the 2013A Bonds.

(c) **Subordinate Obligation Payment Fund.** On or before the last business day of each month, the Water Authority shall deposit in the Subordinate Obligation Payment Fund the sum or sums required to be deposited under or pursuant to the indenture or other instrument securing each Subordinate Obligation.

(d) **Subordinate Obligation Reserve Fund.** On or before the last business day of each month, the Water Authority shall transfer to each trustee with respect to Subordinate Obligations for deposit in the debt service reserve fund with respect to such Subordinate Obligations an amount equal to the amount, if any, required to be deposited therein to build up or replenish such debt service reserve fund as and to the extent required by the applicable Subordinate Obligation or Indenture or other instrument securing such Subordinate Obligation.

(e) **General Reserve Fund.** On the last business day of each month, the Water Authority shall, after making each of the foregoing deposits and transfers, transfer all money remaining in the Water Revenue Fund to the General Reserve Fund. The Water Authority may withdraw money in the General Reserve Fund for any lawful purpose of the Water Authority except to make transfers to the Rate Stabilization Fund.

The Water Authority covenants in the General Resolution to keep appropriate accounting records in which complete and correct entries shall be made of all transactions relating to the Water System. To fulfill this requirement, the Water Authority employs enterprise accounting principles and practices in accordance with Generally Accepted Accounting Principles. See APPENDIX A – WATER AUTHORITY FINANCIAL STATEMENTS. Consistent with such accounting principles and practices and as authorized by the General Resolution, the Water Authority does not maintain on its books the specific funds named in the General Resolution. The Water Authority does, however, account for Water Revenues, Maintenance and Operation Costs, Debt Service and Monthly Accrued Debt Service in a manner consistent with and authorized by the General Resolution, and the accounting system employed by the Water Authority enables the Water Authority to calculate Net Water Revenues and to allocate Water Revenues in the priority specified in the General Resolution.

**Rate Covenant**

The Water Authority covenants under the General Resolution that it will at all times fix, prescribe and collect or cause to be collected rates, fees and charges for Water Service which are reasonably fair and nondiscriminatory and which will be at least sufficient to yield, during the next succeeding fiscal year of the Water Authority, Net Water Revenues sufficient for the payment of all amounts payable from Net Water Revenues (including Subordinate Obligations) and at least equal to 120 percent of the Debt Service on all Bonds and Contracts for such fiscal year. The Water Authority may make adjustments from time to time in such rates, fees and charges and may make such classification thereof as it deems necessary, but shall not reduce the rates, fees and charges then
in effect unless the Net Water Revenues from such reduced rates, fees and charges will at all times be sufficient to meet the requirements of such covenant.

The Water Authority has amended the General Resolution to provide that Interest Subsidy Payments are treated as a reduction to Debt Service rather than as Current Water Revenues. Such amendment will become effective, however, only if and when requisite approvals for an amendment of the General Resolution have been obtained by the Water Authority. By their purchase of 2013A Bonds, the purchasers of such 2013A Bonds consent to such amendment.

Additional Parity Obligations

The Water Authority may at any time issue any Bonds or execute any Contract the payments under and pursuant to which are payable from the Net Water Revenues on a parity with the 2013A Bonds; provided:

(a) For any period of 12 consecutive calendar months within the 24 calendar month period next preceding the month in which such Bonds are issued or such Contract is executed, as the case may be, as evidenced by a certificate of the Water Authority (together with supporting calculations prepared by the Water Authority), (1) the Net Water Revenues shall have been equal to at least 120 percent of the Maximum Annual Debt Service on all Bonds and Contracts outstanding after the issuance of such Bonds or the execution of such Contract, as the case may be, and (2) the Net Water Revenues shall have been sufficient for the payment of all amounts payable from Net Water Revenues during such 12-month period and at least equal to 120 percent of Debt Service on all Bonds and Contracts outstanding during such 12-month period, or

(b) (1) For any period of 12 consecutive calendar months within the 24 calendar month period next preceding the month in which such Bonds are issued or such Contract is executed, as the case may be, as evidenced by a certificate of the Water Authority (together with supporting calculations prepared by the Water Authority), the Net Water Revenues shall have been sufficient for the payment of all amounts payable from Net Water Revenues during such 12-month period and at least equal to 120 percent of Debt Service on all Bonds and Contracts outstanding during such 12-month period, and (2) as evidenced by a certificate of the Water Authority (together with supporting calculations and assumptions prepared by the Water Authority), in each of the five succeeding fiscal years, projected Net Water Revenues shall be sufficient for the payment of all amounts payable from Net Water Revenues in each such fiscal year and at least equal to 120 percent of Debt Service on all Bonds and Contracts to be outstanding in each such fiscal year; and

(c) The Water Authority shall certify that it is not then in default under any Indenture or with respect to any Bonds or Contracts; and

(d) No Bond or Contract shall allow the declaration of Bond Payments or Installment Payments to be immediately due and payable in the event of default by the Water Authority thereunder or under the applicable Indenture unless such remedy is made applicable to all Bonds and Contracts then outstanding. (None of the Water Authority’s Outstanding Bonds or Contracts allows such a declaration.)

Notwithstanding the foregoing provisions, there shall be no limitations on the ability of the Water Authority to execute any Contract or to issue any Bonds at any time to refund any outstanding Bonds or any outstanding Contract or to execute Reimbursement Agreements.

Limitations on Remedies

The ability of the Water Authority to comply with its covenants under the Indenture may be adversely affected by actions or events outside of the control of the Water Authority and may be adversely affected by actions taken (or not taken) by voters, property owners, taxpayers or payers of assessments, fees and charges. See CONSTITUTIONAL LIMITATIONS. Furthermore, any remedies available to the Trustee or the owners of the 2013A Bonds upon the occurrence of an event of default under the Indenture are in many respects dependent upon judicial actions which are often subject to discretion and delay and could prove both expensive and time consuming to obtain.
In addition to the limitations on remedies contained in the Indenture, the rights and obligations under the Indenture may be subject to bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to limitations on legal remedies against public entities in the State of California. The opinion to be delivered by Orrick, Herrington & Sutcliffe LLP, bond counsel, concurrently with the issuance of the 2013A Bonds, that the Indenture constitutes a valid and binding obligation of the Water Authority will be subject to such limitations and the various other legal opinions to be delivered concurrently with the issuance of the 2013A Bonds will be similarly qualified. A complete copy of the proposed form of opinion of bond counsel is set forth in Appendix F hereto. In the event the Water Authority fails to comply with its covenants under the Indenture or to pay principal and interest on the 2013A Bonds, there can be no assurance that available remedies will be adequate to fully protect the interests of the holders of the 2013A Bonds.
The table below sets forth the principal and interest payable on the 2013A Bonds, total payments due with respect to the 1998A Certificates, the 2002A Certificates, the 2004A Certificates, the 2005A Certificates, the 2008A Certificates, the 2010A Bonds, the 2010B Bonds, the 2011A Bonds and the 2011B Bonds, and the total payments due (but does not reflect the refunding described under PLAN OF REFUNDING):
The Water Authority was organized on June 9, 1944, under the Act for the primary purpose of supplying water to San Diego County for wholesale distribution to the Water Authority’s member agencies in order to meet their respective needs for beneficial uses and purposes.

The Water Authority is authorized to acquire water and water rights within or outside the State of California (the “State”); to develop, store and transport such water; to provide, sell and deliver water for beneficial uses and purposes and to provide, sell and deliver water of the Water Authority not needed or required for beneficial purposes of its member agencies to areas outside the boundaries of the Water Authority.

The Act also authorizes the Water Authority to exercise the power of eminent domain; to levy and collect taxes; to fix, prescribe and collect rates or other charges for the delivery of water, use of facilities or property or provisions for service; and to fix in each fiscal year a Water Standby Availability Charge on land within the boundaries of the Water Authority to which water is made available by the Water Authority.

The Water Authority is authorized by the Act to utilize any part of its water, and any parts of its facilities used for the development, storage, and transportation of water, to provide, generate, and deliver hydroelectric power, and may acquire, construct, operate and maintain any and all of its facilities for such utilization, and the Act authorizes the Water Authority to purchase, lease, sell and otherwise dispose of real or personal property. The Water Authority is authorized to contract to provide, sell and deliver hydroelectric power to the United States of America, to the State for the State Water Project and to any other person engaged in the sale of electric power at retail or wholesale. The Water Authority is also authorized to acquire, construct, own, operate, control or use works for supplying its member agencies with gas or electricity and to purchase, sell and exchange gas and electricity from, to and with any public agency, private company or person engaged in the sale of gas or electricity at retail.

Member Agencies

The Water Authority was organized by 11 member agencies in 1944. The Water Authority currently has 24 member agencies, consisting of 6 cities, 17 special districts, and the Pendleton Military Reservation. Reference is made to the map in the front portion of this Official Statement for the location of the member agencies. Pursuant to the provisions of the Act, additional member agencies may join the Water Authority. Subject to certain limitations, the Act also permits member agencies to withdraw from the Water Authority.

The following are the member agencies of the Water Authority:

**Cities**
- Del Mar
- Oceanside
- Escondido
- Poway
- National City
- San Diego

**Special Districts**
- Carlsbad Municipal Water District
- Fallbrook Public Utility District
- Helix Water District
- Lakeside Water District
- Olivenhain Municipal Water District
- Otay Water District
- Padre Dam Municipal Water District
- Rainbow Municipal Water District
- Ramona Municipal Water District
- Rincon del Diablo Municipal Water District
- San Dieguito Water District
- Santa Fe Irrigation District
- South Bay Irrigation District
- Vallecitos Water District
- Valley Center Municipal Water District
- Vista Irrigation District
- Yuima Municipal Water District

**Federal Agency**
- Pendleton Military Reservation
Board of Directors, Management and Employee Relations

Board of Directors. The decision-making body of the Water Authority is its 36-member Board of Directors (the “Board”). Each of the member agencies of the Water Authority has at least one representative on the Board. Any member agency may appoint one additional representative for each full five percent (5%) of total assessed value of property taxable for Water Authority purposes that is within the public agency. As a result, the City of San Diego is currently entitled to representation by ten directors and Helix Water District, Otay Water District and Carlsbad Municipal Water District are each currently entitled to representation by two directors.

Under the Act, a member agency’s vote is based on its “total financial contribution” to the Water Authority since the Water Authority was organized in 1944. Total financial contribution includes all amounts paid in taxes, assessments, fees and charges to or on behalf of the Water Authority or The Metropolitan Water District of Southern California (“MWD”). The Act authorizes each Board member to cast one vote for each $5,000,000, or major fractional part thereof, of the total financial contribution paid by the member agency. As of January 1, 2013, the member agencies’ voting entitlements are as follows:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Votes</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad Municipal Water District</td>
<td>68,737</td>
<td>3.51%</td>
</tr>
<tr>
<td>City of Del Mar</td>
<td>5,897</td>
<td>0.30%</td>
</tr>
<tr>
<td>City of Escondido</td>
<td>68,172</td>
<td>3.48%</td>
</tr>
<tr>
<td>Fallbrook Public Utility District</td>
<td>47,607</td>
<td>2.43%</td>
</tr>
<tr>
<td>Helix Water District</td>
<td>137,227</td>
<td>7.01%</td>
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<tr>
<td>Lakeside Water District</td>
<td>14,911</td>
<td>0.76%</td>
</tr>
<tr>
<td>City of National City</td>
<td>14,672</td>
<td>0.75%</td>
</tr>
<tr>
<td>City of Oceanside</td>
<td>98,898</td>
<td>5.05%</td>
</tr>
<tr>
<td>Olivenhain Municipal Water District</td>
<td>60,094</td>
<td>3.07%</td>
</tr>
<tr>
<td>Otay Water District</td>
<td>104,313</td>
<td>5.33%</td>
</tr>
<tr>
<td>Padre Dam Municipal Water District</td>
<td>52,837</td>
<td>2.70%</td>
</tr>
<tr>
<td>Pendleton Military Reservation</td>
<td>2,365</td>
<td>0.12%</td>
</tr>
<tr>
<td>City of Poway</td>
<td>42,734</td>
<td>2.18%</td>
</tr>
<tr>
<td>Rainbow Municipal Water District</td>
<td>80,021</td>
<td>4.09%</td>
</tr>
<tr>
<td>Ramona Municipal Water District</td>
<td>31,020</td>
<td>1.58%</td>
</tr>
<tr>
<td>Rincon del Diablo Municipal Water District</td>
<td>29,496</td>
<td>1.51%</td>
</tr>
<tr>
<td>City of San Diego</td>
<td>781,407</td>
<td>39.91%</td>
</tr>
<tr>
<td>San Dieguito Water District</td>
<td>21,139</td>
<td>1.08%</td>
</tr>
<tr>
<td>Santa Fe Irrigation District</td>
<td>30,070</td>
<td>1.54%</td>
</tr>
<tr>
<td>South Bay Irrigation District</td>
<td>44,440</td>
<td>2.28%</td>
</tr>
<tr>
<td>Vallecitos Water District</td>
<td>49,675</td>
<td>2.54%</td>
</tr>
<tr>
<td>Valley Center Municipal Water District</td>
<td>107,341</td>
<td>5.48%</td>
</tr>
<tr>
<td>Vista Irrigation District</td>
<td>57,985</td>
<td>2.96%</td>
</tr>
<tr>
<td>Yuima Municipal Water District</td>
<td>6,685</td>
<td>0.34%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>1,957,743</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Directors are appointed by the chief executive officers of the respective member agencies, subject to approval by the agencies’ governing bodies. Although directors are appointed for a six-year term, the Act states that all directors serve at the pleasure of the agencies that appointed them and may be removed by a majority vote of the governing board. The Act further provides that member agencies with more than one representative may require through ordinance that its directors vote as a block, as determined by a majority of such member agency’s representatives. The City of San Diego has adopted such an ordinance. Another provision of the Act states that, except as otherwise provided in the Act, a 55 percent vote is required for Board action. At such time as the City of San Diego’s proportion of financial contribution equals 38 percent or less, however, all questions will be required to receive only a majority of the vote.
Board; Thomas V. Wornham, representing the City of San Diego, serves as Chair of the Board; and [______], representing [________], serves as Vice-Chair of the Board. Michael T. Hogan, representing the Santa Fe Irrigation District, is the current Secretary of the Board;

The Board has five standing committees: Administrative and Finance; Engineering and Operations; Imported Water; Legislation, Conservation and Outreach; and Water Planning. These committees review Water Authority matters and recommend action to be taken by the Board.

Management. Maureen A. Stapleton serves as General Manager of the Water Authority. Ms. Stapleton became General Manager of the Water Authority in January 1996 following nine years of service at the City of San Diego as Deputy City Manager and Assistant City Manager. Ms. Stapleton has over 25 years of experience in municipal government in a variety of positions. Ms. Stapleton received her Bachelor of Science degree from California State Polytechnic University, Pomona and earned her Master of Public Administration from California State University Consortium, Long Beach.

Daniel S. Hentschke serves as the Water Authority’s General Counsel. Mr. Hentschke became the Water Authority’s General Counsel in February 1998. Before joining the Water Authority, Mr. Hentschke was a member of the Law Firm of Brown, Diven & Hentschke and served as City Attorney for the cities of Oceanside (1991-1998), San Marcos (1988-1992), and Solana Beach (1986-1998). Prior to that, he was Assistant City Attorney for the City of Carlsbad and Deputy City Attorney for the City of San Diego. He has extensive experience representing a variety of California public agencies as general and special counsel and in public finance matters. Mr. Hentschke received a Bachelor of Arts degree from the University of California, Santa Barbara, and earned his Doctor of Jurisprudence at the University of the Pacific, McGeorge School of Law.

Frank Belock, Jr. serves as Deputy General Manager of the Water Authority. Mr. Belock joined the Water Authority in August 2007. Before joining the Water Authority, Mr. Belock was employed by the Parsons Corporation serving in the capacity of Area Manager for the San Diego office. Mr. Belock is a California registered professional civil engineer. Prior to his employment with Parsons, he served as Water Department Director and Director of Engineering and Capital Projects for the City of San Diego. Mr. Belock received his Bachelor of Science degree in Civil Engineering from the University of Vermont and his Master of Public Administration from San Diego State University.

Sandra L. Kerl serves as Deputy General Manager of the Water Authority. Ms. Kerl joined the Water Authority in November 2009 following over twenty-five years of service in municipal management. Most recently Ms. Kerl served as City Manager in the City of La Mesa. She received a Bachelor of Arts degree in political science from Cal Poly, San Luis Obispo and a Master of Business Administration Degree from the University of Redlands.

Dennis A. Cushman serves as Assistant General Manager of the Water Authority. Prior to his appointment as Assistant General Manager in August 2002, Mr. Cushman served as Public Affairs Director of the Water Authority beginning in July 1997. Mr. Cushman has more than 20 years experience in public affairs and management in the public and private sectors. He holds a Bachelor of Arts degree in journalism from San Diego State University.

Tracy M. McCraner serves as Director of Finance/Treasurer for the Water Authority. Ms. McCraner joined the Water Authority in August 2012 following twenty-five years of service in municipal finance. Most recently Ms. McCraner served as the Finance Director/Treasurer for the City of Newport Beach. Prior to her employment with the City of Newport Beach she served as Acting Comptroller and Director of Financial Reporting in the Office of the Comptroller for the City of San Diego. Ms. McCraner received her Bachelor of Science degree in Accounting from San Diego State University.

William J. Rose, P.E. serves as Director of Engineering of the Water Authority. Mr. Rose joined the Water Authority in February 2001 as Director of Right of Way and, between 2009 and 2011, Mr. Rose served as the Water Conservation Program Executive. Mr. Rose has 30 years of engineering and right of way experience at the regional level working for San Diego Gas and Electric Company (“SDG&E”), the San Diego Metropolitan Transit Development Board and the Water Authority. Mr. Rose received his bachelor’s degree in Civil Engineering from California Polytechnic State University, San Luis Obispo, and is a registered civil engineer in California.
David G. Shank serves as the Financial Planning Manager for the Water Authority. Mr. Shank joined the Water Authority in 2006. Prior to joining the Water Authority, Mr. Shank served as a consultant for Malcolm Pirnie and a resource economist for the United States Department of Agriculture’s Economic Research Service. Mr. Shank received a Master of Science degree from the University of California, Davis in Resource Economics, a Master of Science degree from the University of Illinois at Urbana-Champaign in Environmental Engineering and a Bachelor of Arts degree from Emory University in Economics.

Employee Relations. As of December 31, 2012, the Water Authority had 241 full-time equivalent employees. Approximately 82% of the employees are members of Teamsters Local 911 which is the recognized employee organization designated to represent them in their employment relations with the Water Authority, including wages, hours and other terms and conditions of employment. In the final year of the contract all employees will be contributing 8% of the required CalPERS cost. The Water Authority’s current labor contracts with Local 911 are in effect through the fiscal year ending June 30, 2015.

CalPERS Defined Benefit Pension Plan. The Water Authority contributes to the California Public Employees Retirement System (“CalPERS”), an agent multiple-employer public employee defined benefit pension plan. CalPERS provides retirement, disability benefits, and death benefits to plan members and beneficiaries.

The Water Authority’s contributions to CalPERS for fiscal years ended June 30, 2011 and June 30, 2012 were $4,681,887 and $5,190,542, respectively. For the fiscal years ended June 30, 2011 and June 30, 2012, the Water Authority’s annual contribution rates were 16.552 percent and 19.623 percent, respectively, of salaries and wages. For the fiscal year ending June 30, 2013, the contribution rate is 19.726 percent of salaries and wages. The Water Authority also pays seven percent of the employees required contribution and the employee pays the remaining one percent. As of June 30, 2011, the Water Authority’s unfunded pension obligation as determined by CalPERS was approximately $40.5 million based on the actuarial value of plan assets (representing a funded ratio of 73.6 percent based on the actuarial value of plan assets and 66.6 percent based on the market value of assets).

Effective by July 1, 2012, Technical/Support, Professional/Administrative, Managerial/Supervisory, and Confidential employees increased the amount they pay toward their retirement plan (CalPERS) by 1.25 percent, for a total contribution of 5.75 percent. Executive and Senior Management employees increased their contribution by 1.75 percent, for a total contribution of 6.25 percent effective by July 1, 2012. Beginning July 1, 2014, all employees will be contributing 8% of their salary to their CalPERS pension. For additional information on the Water Authority’s retirement plan obligation, see APPENDIX A – WATER AUTHORITY FINANCIAL STATEMENTS.

Other Post-Employment Benefits. The Water Authority established a Retiree Healthcare Plan (“Plan”), a single-employer defined benefit retiree healthcare plan. This Plan, which is administered by the Water Authority, provides employees who retire directly from the Water Authority at age 55 with five years of service a cash subsidy for monthly medical insurance premiums up to a cap of $200 per employee or $320 for employee plus spouse. Payments cease at age 65 when the retiree or spouse is eligible for Medicare. If applicable, a cash subsidy for the monthly medical premium continues up to a cap of $160 for a spouse until age 65 is attained. Surviving spouses are also eligible for this benefit. Employees who retire directly from the Water Authority at age 55 with five years of service are eligible to continue medical coverage as a participant with active employees at a blended premium rate until eligible for Medicare at age 65 as an implied subsidy. The required contribution is based on projected pay-as-you-go financing requirements.

Governmental Accounting Standards Board Statement No. 45 requires each employer to calculate its actuarial accrued liability on explicit and implicit other post-employment benefits. It also requires a calculation of the annual required contribution, representing the annual contribution that will fund the current active and retired members’ other post-employment benefits by the end of their working lifetimes. For the fiscal years ended June 30, 2011 and June 30, 2012, the Water Authority contributed $99,000 and $103,260 in current premiums, respectively. The Water Authority’s unfunded liability for the Plan was approximately $3.9 million (representing a funded status of 0.00 percent), based on its most recent actuarial valuation dated January 1, 2011. For additional information on the Water Authority’s obligations under the Plan, see APPENDIX A – WATER AUTHORITY FINANCIAL STATEMENTS.
WATER AUTHORITY SERVICE AREA

The Water Authority’s service area lies within the foothill and coastal areas of the westerly third of San Diego County, encompassing 947,288 acres (1,480 square miles). When the Water Authority was established in 1944, its service area consisted of 94,707 acres. Growth has primarily resulted from the addition of and annexation of additional service areas by member agencies. The City of San Diego, with 213,121 acres, is the largest service area within the Water Authority’s total service area. In its 2010 county population estimate, the United States Bureau of the Census ranked San Diego County the second largest county by population in California. Of the total population of San Diego County, 98 percent live within the Water Authority’s service area. Based upon population estimates provided by the member agencies, it is estimated that the population of the Water Authority’s service area as of June 30, 2012 was 3,201,714. The population of the City of San Diego, estimated at 1,376,173 as of June 30, 2012, represented approximately 43 percent of the total population of the Water Authority’s service area.

The Water Authority’s service area is a semi-arid region where historically the natural occurrence of water from rainfall and groundwater provides a firm water supply for only a small portion of the water needs of the current population. Since 1990, the Water Authority has provided an average of 85 percent of the water supply within its service area, with annual amounts ranging from a high of 95 percent in fiscal year ended June 30, 1990 to a low of 75 percent in fiscal year ended June 30, 1999. In fiscal year ended June 30, 2012, the Water Authority provided an estimated 81 percent of the water supply within its service area (excluding estimated conservation savings). As a wholesaling entity, the Water Authority has no retail customers, but serves only its member agencies.

For additional demographic and economic information relating to San Diego County, see APPENDIX B - ECONOMY OF SAN DIEGO COUNTY.
The following table sets forth the area of the Water Authority served by each member agency and the population of each member agency service area as estimated by the respective member agencies.

### AREA AND POPULATION – WATER AUTHORITY MEMBER AGENCIES
(as of June 30, 2012)

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Total Member Agency Service Area (acres)</th>
<th>Percent of Total Water Authority Service Area</th>
<th>Population Estimate</th>
<th>Percent of Total Water Authority Service Area Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>20,640.0</td>
<td>2.18%</td>
<td>84,838</td>
<td>2.65%</td>
</tr>
<tr>
<td>City of Del Mar</td>
<td>1,442.0</td>
<td>0.15</td>
<td>4,161</td>
<td>0.13</td>
</tr>
<tr>
<td>City of Escondido</td>
<td>21,569.0</td>
<td>2.28%</td>
<td>141,788</td>
<td>4.43</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>27,988.0</td>
<td>2.96%</td>
<td>35,000</td>
<td>1.00</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>31,350.0</td>
<td>3.31%</td>
<td>267,922</td>
<td>8.37</td>
</tr>
<tr>
<td>Lakeside W.D.</td>
<td>11,488.0</td>
<td>1.21%</td>
<td>35,500</td>
<td>1.11</td>
</tr>
<tr>
<td>City of National City</td>
<td>4,812.4</td>
<td>0.51%</td>
<td>58,586</td>
<td>1.83</td>
</tr>
<tr>
<td>City of Oceanside</td>
<td>26,982.5</td>
<td>2.85%</td>
<td>167,943</td>
<td>5.24</td>
</tr>
<tr>
<td>Olivenhain M.W.D.</td>
<td>30,942.1</td>
<td>3.27%</td>
<td>81,701</td>
<td>2.55</td>
</tr>
<tr>
<td>Otay W.D.</td>
<td>80,320.0</td>
<td>8.48%</td>
<td>208,000</td>
<td>6.50</td>
</tr>
<tr>
<td>Padre Dam M.W.D.</td>
<td>54,402.2</td>
<td>5.75%</td>
<td>96,589</td>
<td>3.02</td>
</tr>
<tr>
<td>Pendleton Military Reservation</td>
<td>134,625.0</td>
<td>14.22%</td>
<td>79,600</td>
<td>2.49</td>
</tr>
<tr>
<td>City of Poway</td>
<td>25,047.0</td>
<td>2.64%</td>
<td>48,382</td>
<td>1.51</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>47,260.4</td>
<td>4.99%</td>
<td>19,611</td>
<td>0.61</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td>44,868.0</td>
<td>4.84%</td>
<td>33,360</td>
<td>1.04</td>
</tr>
<tr>
<td>Rincon del Diablo M.W.D.</td>
<td>10,596.1</td>
<td>1.12%</td>
<td>29,955</td>
<td>0.93</td>
</tr>
<tr>
<td>City of San Diego</td>
<td>213,121.0</td>
<td>22.51%</td>
<td>1,376,173</td>
<td>42.98</td>
</tr>
<tr>
<td>San Dieguito W.D.</td>
<td>5,652.7</td>
<td>0.60%</td>
<td>39,593</td>
<td>1.24</td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td>10,359.0</td>
<td>1.09%</td>
<td>19,400</td>
<td>0.61</td>
</tr>
<tr>
<td>South Bay I.D.</td>
<td>13,836.9</td>
<td>1.46%</td>
<td>125,174</td>
<td>3.91</td>
</tr>
<tr>
<td>Vallecitos W.D.</td>
<td>29,630.0</td>
<td>3.13%</td>
<td>94,871</td>
<td>2.96</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>64,253.0</td>
<td>6.79%</td>
<td>25,453</td>
<td>0.79</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>21,167.1</td>
<td>2.24%</td>
<td>126,244</td>
<td>3.95</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>13,460.0</td>
<td>1.42%</td>
<td>1,870</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Total Water Authority</strong></td>
<td><strong>946,812.4</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>3,201,714</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

### WATER AUTHORITY WATER SUPPLY

The Water Authority’s mission is to provide its service area a safe and reliable water supply. Historically, the principal source of supply for the Water Authority’s service area has been water purchased by the Water Authority from The Metropolitan Water District of Southern California (“MWD”) for sale to the Water Authority’s member agencies. However, historic supply shortage events and continued population growth in the Water Authority’s service area have reinforced the need for diversification of the Water Authority’s water supply. Therefore, consistent with its mission statement, the Water Authority has actively pursued a strategy of supply diversification that includes the acquisition and importation of additional water supplies, the development of additional local water supply projects and augmentation of its water supply via local and regional water storage capacity. Water supplies utilized within the Water Authority service area originate from two sources: (1) water imported by the Water Authority and (2) local supplies (such as local runoff, groundwater, recycled water, and seawater desalination). The Water Authority has implemented programs and supported new technologies to increase local supply development. A significant milestone in local supply development was reached at the end of 2012, when the Water Authority Board of Directors approved a long-term Water Purchase Agreement with Poseidon for the purchase of 48,000 to 56,000 acre-feet per year of desalinated seawater from the Carlsbad Desalination Project (“Carlsbad Project”). The Carlsbad Project is scheduled to come on-line in early calendar year 2016. See Future Water Supply.
MWD remains the Water Authority’s largest source of imported water. See Water Purchases from The Metropolitan Water District of Southern California. MWD obtains its water supply from two primary sources: the Colorado River, via MWD’s Colorado River Aqueduct, and the State of California Department of Water Resources’ State Water Project (“SWP”), via the Edmund G. Brown California Aqueduct. A map in the front portion of this Official Statement provides the location of the Colorado River Aqueduct and the California Aqueduct. See MWD Water Supply.

As an alternative to purchasing all of its imported water from MWD, the Water Authority has begun to diversify its purchases through core supply transfers and dry-year transfers. Since 2003, the Water Authority has been receiving a portion of its imported water pursuant to the terms of the Quantification Settlement Agreement (“QSA”) among the State acting by and through the Department of Fish and Wildlife (“DFW”), the Coachella Valley Water District (“CVWD”), the Imperial Irrigation District (“IID”) and the Water Authority, executed on October 10, 2003, the Water Transfer Agreement (defined below) and other QSA related agreements. See Quantification Settlement Agreement. Water that the Water Authority receives from IID is conveyed through the Colorado River Aqueduct pursuant to an exchange agreement with MWD. The Water Authority began receiving transferred water from IID in December 2003. Starting with the initial delivery of 10,000 acre-feet, the amount of water to be delivered is increasing according to an agreed-upon schedule until the maximum transfer yield of 200,000 acre-feet per year is achieved in 2021. (Quantities of water are expressed in terms of acre-feet. An acre-foot is the amount of water that will cover one acre to a depth of one foot and is equivalent to approximately 326,000 gallons, which is approximately the average annual water use of two households of four persons each.) In addition, the Water Authority’s portfolio includes imported supplies from water conserved as a result of the lining of the All-American Canal and the Coachella Canal. The Water Authority began receiving water from the Coachella Canal Lining Project in 2007 and from the All-American Canal Lining Project in 2009. In 2012, the Water Authority received approximately 80,000 acre-feet from Coachella Canal Lining Project and All-American Canal Lining Project transfers. See Quantification Settlement Agreement. The Water Authority also successfully secured dry-year water transfers to provide supplemental supplies to the region during MWD’s mandatory cutbacks to full service customers that started in July 2009 and ended in April 2011. Dry-year transfers are short-term transfers or leases, typically agreed to and completed within one to three years.

The Water Authority’s progress in supply diversification for the five fiscal years ended June 30, 2008 through June 30, 2012 is set forth in the following table:

### WATER AUTHORITY SERVICE AREA WATER SUPPLY

#### Fiscal Year Ended June 30 (In Acre-Feet)

<table>
<thead>
<tr>
<th>Supply Source</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>MWD</td>
<td>528,321</td>
<td>441,545</td>
<td>334,814</td>
<td>260,337</td>
<td>274,351</td>
</tr>
<tr>
<td>IID Transfer</td>
<td>50,000</td>
<td>55,000</td>
<td>65,000</td>
<td>75,000</td>
<td>85,000</td>
</tr>
<tr>
<td>Canal Lining</td>
<td>30,582</td>
<td>59,244</td>
<td>79,626</td>
<td>81,507</td>
<td>80,200</td>
</tr>
<tr>
<td>Dry Year Transfer</td>
<td>--</td>
<td>--</td>
<td>15,520</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Surface Water(1)</td>
<td>39,339</td>
<td>43,757</td>
<td>27,335</td>
<td>67,111</td>
<td>61,018</td>
</tr>
<tr>
<td>Groundwater</td>
<td>18,475</td>
<td>18,031</td>
<td>18,556</td>
<td>19,928</td>
<td>17,862</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>25,214</td>
<td>26,323</td>
<td>25,592</td>
<td>23,062</td>
<td>24,007</td>
</tr>
<tr>
<td>Total(2)</td>
<td>691,931</td>
<td>643,900</td>
<td>566,443</td>
<td>526,945</td>
<td>542,438</td>
</tr>
</tbody>
</table>

1. Fluctuations in surface water use attributed to variation in local hydrology.

2. Drop in demand on MWD between 2008 and 2011 due to ramp-up of extraordinary conservation savings, lingering economic downturn, and MWD mandatory cutbacks.

The Water Authority continues to pursue regional supply diversification efforts through the support of long-term planning efforts for local surface water, groundwater, recycled water, local seawater desalination and conservation efforts. See Future Water Supply.
Water storage facilities are also critical to assuring consistent water availability notwithstanding fluctuation in available supply. The Water Authority has entered into agreements to expand available storage capacity. See WATER AUTHORITY WATER FACILITIES – Water Storage. One of the purposes of the Water Authority’s Capital Improvement Program is to interconnect a number of member agency storage facilities. Another purpose is to enhance the Water Authority’s own storage capacity. See THE CAPITAL IMPROVEMENT PROGRAM.

Local Water Supplies

In 1990, San Diego County area local supplies consisted primarily of surface water and groundwater sources which represented only five percent of the region’s total water supply. These sources are heavily dependent upon precipitation and are cyclical in nature. Over the last several decades, total local supplies have ranged from a low of approximately 33,000 acre-feet in fiscal year ended June 30, 1991 to more than 152,000 acre-feet in fiscal year ended June 30, 1999. A number of the member agencies have storage facilities for the impounding of local runoff and water purchased from the Water Authority. The total capacity of such storage is approximately 590,000 acre-feet. Such storage is generally only available to the member agencies operating these facilities and is generally not available for use by other member agencies, since most storage facilities are currently not interconnected. However, some member agencies are able to sell water to certain other agencies under separate agreements.

In fiscal year 2012, local supplies (excluding savings achieved through water conservation) accounted for approximately 19 percent of the region’s water supply portfolio. Recent increases were achieved through the development of recycled water supplies and expanded groundwater use. The Water Authority has encouraged development of these additional local water supply projects through the award of Local Water Supply Development (“LWSD”) incentives of up to $200 per acre-foot for recycled water and groundwater produced and beneficially reused within the Water Authority’s service area. The purpose of the Water Authority’s LWSD program is to promote the development of cost-effective water recycling and groundwater projects that prevent or reduce a demand for imported water and improve regional water supply reliability. The LWSD program reimburses member agencies for all or a portion of the difference between the actual per acre-foot cost of producing recycled water, and the revenue generated by the LWSD participant through the sale of that acre-foot of recycled water (not to exceed $200 per acre-foot). In February 2008, the program was expanded to include funding for local brackish and seawater desalination projects. Funding is currently suspended, however, for new projects seeking LWSD funding.

The Water Authority also provides financial assistance through the Local Investigations and Studies Assistance (“LISA”) program for conceptual-level studies to evaluate potential new member agency local water supply projects. The LISA program provides matching grant funding on a 50-50 cost sharing basis for exploratory project development activities including feasibility studies, field investigations, and environmental studies and documentation. The Water Authority has committed $5.5 million over the term of the agreements, the last of which is scheduled to expire on June 30, 2013, to assist its member agencies with studies to develop additional new local supplies. This funding program has been discontinued for the immediate future.

The Water Authority is also currently administering a California Proposition 50 grant funded Recycled Water Retrofit Assistance Program that provides a portion of the reasonable costs incurred by the Water Authority’s member agencies and their public agency customers for retrofit work completed to facilitate the conversion from potable to recycled water for landscape irrigation and other uses. Up to $800,000 in grant funding will be awarded through this funding source.

Water Transfers

Core water transfers have emerged as one of the Water Authority’s primary alternatives to heavy reliance upon purchases from MWD, thus helping the Water Authority accomplish its supply diversification goal. In general, water transfers typically involve purchasing water for a specified period of time from an agency or district that then reduces its water use by the equivalent amount. The principle behind water transfers is that market forces will work to reallocate water. The Water Authority/IID core water transfer, included in the QSA, is an example of this principle and will ultimately provide the Water Authority with 200,000 acre-feet per year by 2021. Between calendar years 2003 and 2011 the Water Authority received an aggregate of 410,000 acre-feet from this transfer.
Quantification Settlement Agreement

The Quantification Settlement Agreement ("QSA") establishes a plan for California to reduce its overuse of Colorado River water over a 15-year period. The Water Authority’s Water Transfer Agreement with IID, described in detail below, is a cornerstone of the QSA. The Water Authority’s Colorado River Program manages the implementation of the Water Authority’s agreements under the QSA, including the Water Transfer Agreement and the agreements relating to lining of portions of the All-American and Coachella Canals. The Water Authority expects to receive 30 percent of its water supply from the water transfer and canal lining projects by 2020.

The following table details the existing priorities of the California users of Colorado River water under the 1931 Seven-Party Agreement. The Water Authority is entitled to Priority 3(a) under its Water Transfer Agreement with IID. The Colorado River supplies its purchases from MWD fall under Priority 4 and, when available 5(a) and 5(b).

PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT(1)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
<th>Acre-Feet Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Palo Verde Irrigation District gross area of 104,500 acres of land in the Palo Verde Valley</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Yuma Project in California not exceeding a gross area of 25,000 acres in California</td>
<td></td>
</tr>
<tr>
<td>3(a)</td>
<td>Imperial Irrigation District and other lands in Imperial and Coachella Valleys(2) to be served by All-American Canal</td>
<td>3,850,000</td>
</tr>
<tr>
<td>3(b)</td>
<td>Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Metropolitan Water District of Southern California for use on the coastal plain</td>
<td>550,000</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td>4,400,000</td>
</tr>
<tr>
<td>5(a)</td>
<td>Metropolitan Water District of Southern California for use on the coastal plain</td>
<td>550,000</td>
</tr>
<tr>
<td>5(b)</td>
<td>Metropolitan Water District of Southern California for use on the coastal plain(3)</td>
<td>112,000</td>
</tr>
<tr>
<td>6(a)</td>
<td>Imperial Irrigation District and other lands in Imperial and Coachella Valleys to be served by the All-American Canal</td>
<td></td>
</tr>
<tr>
<td>6(b)</td>
<td>Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa</td>
<td>300,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>5,362,000</td>
</tr>
<tr>
<td>7</td>
<td>Agricultural use in the Colorado River Basin in California</td>
<td>Remaining surplus</td>
</tr>
</tbody>
</table>

Source: MWD.

(1) Agreement dated August 18, 1931, among Palo Verde Irrigation District, Imperial Irrigation District, Coachella Valley County Water District, Metropolitan, the City of Los Angeles, the City of San Diego and the County of San Diego. These priorities were memorialized in the agencies’ respective water delivery contracts with the Secretary of the Interior.

(2) The Coachella Valley Water District serves Coachella Valley.

(3) In 1946, the City of San Diego, the Water Authority, MWD and the Secretary of the Interior entered into a contract that merged and added the City of San Diego and the County of San Diego’s rights to storage and delivery of Colorado River water to the rights of MWD.
Water Authority/Imperial Irrigation District Water Transfer. In September 1995, the Water Authority approved a Memorandum of Understanding with IID to negotiate a long-term transfer of conserved agricultural water. In July 1996, the Water Authority and IID agreed to draft terms for a Cooperative Water Conservation and Transfer Program. On April 29, 1998, the Water Authority and IID approved an Agreement for the Transfer of Conserved Water (the “Water Transfer Agreement”). Concurrently with its approval of the QSA on October 10, 2003, the Water Authority executed a Revised Fourth Amendment to the Water Transfer Agreement and commenced implementation of the water transfer. The Water Transfer Agreement provides that reliable water saved through conservation measures in Imperial Valley will be transferred to the Water Authority through existing MWD facilities. This water supply is highly reliable because it is part of IID’s Colorado River Water, Priority 3(a). This water would likely remain available to the Water Authority even if Colorado River supplies to MWD were interrupted under its lower Priority 4. Implementation of the water transfer began in 2003 with a transfer of 10,000 acre-feet of water. IID has conserved the amount of water required to meet its obligation under the Water Transfer Agreement every year since 2003, with the exception of 2011. Due to the pendency of litigation challenging the QSA, its water conservation fell short by 16,722 acre-feet. This water was conserved and transferred to the Water Authority in 2012 and will be accounted for that year, rather than in 2011, pending the USBR’s verification of the conserved amount.

In 2013, the Water Authority will receive 100,000 acre-feet of conserved water from the Water Transfer Agreement. The Water Transfer Agreement provides for annual deliveries through 2047 as follows:

<table>
<thead>
<tr>
<th>SCHEDULED ANNUAL WATER TRANSFER DELIVERIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calendar Year</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>2013</td>
</tr>
<tr>
<td>2014</td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>2016</td>
</tr>
<tr>
<td>2017</td>
</tr>
<tr>
<td>2018</td>
</tr>
<tr>
<td>2019</td>
</tr>
<tr>
<td>2020</td>
</tr>
<tr>
<td>2021 – 2047</td>
</tr>
</tbody>
</table>

All-American Canal and Coachella Canal Lining Projects. As part of the QSA and related negotiations, MWD assigned to the Water Authority its rights to develop approximately 77,700 acre-feet per year of conserved Colorado River water from projects to line portions of the earthen All-American Canal (All-American Canal Lining Project or “AACLIP”) and the Coachella Canal (Coachella Canal Lining Project or “CCLP” and, collectively with the AACLIP, the “Canal Lining Projects”) pursuant to an Allocation Agreement among various parties to the QSA (the “Allocation Agreement”). Construction work on the CCLP was complete in April 2007 and produces about 21,500 acre-feet of conserved water annually to the Water Authority. Water began flowing in the AACLIP in 2009, and 56,200 acre-feet of water is conserved annually for the Water Authority. The AACLIP and CCLP also provide an additional 16,000 acre-feet of water supply annually for use by certain Indian Tribes and local agencies located in northern San Diego County. The Water Authority is also entitled to receive up to an additional 4,850 acre-feet of water supply annually from water saved on environmental mitigation of the CCLP. The Water Authority has received more than 376,000 acre-feet of water supply from Canal Lining Projects through 2012. Conserved water from the Canal Lining Projects is expected to provide the Water Authority’s service area with more than 8.5 million acre-feet of water over the 110-year life of the agreement.

Exchange Agreement. The 2003 Exchange Agreement between the Water Authority and MWD provides for transportation of Colorado River water from the Canal Lining Projects and the IID water transfer through MWD facilities. Under the Exchange Agreement, MWD is required to deliver water from the IID water transfer and Canal Lining Projects for up to 45 years and 110 years, respectively. The Water Authority agreed to pay MWD’s lawful
wheeling rate for transportation of these water supplies. The Water Authority has received 500,000 acre feet of water supply from the IID water transfer through 2012.

Quantification Settlement Agreement Related Litigation. On November 5, 2003, IID filed a validation action in Imperial County Superior Court, seeking a judicial determination that 13 agreements associated with the IID/SDCWA water transfer and the QSA are valid, legal and binding. Other lawsuits also were filed contemporaneously challenging the execution, approval and implementation of the QSA on various grounds. All of the QSA cases were coordinated in Sacramento Superior Court. A final judgment invalidating 11 of the 13 agreements in phase 1 of the trial was entered on February 11, 2010, and subsequently appealed. On December 7, 2011 the Court of Appeal issued its opinion reversing the judgment and remanding to the trial court for further proceedings. Quantification Settlement Agreement Cases (2011) 201 Cal. App. 4th 758. The Appellate Court decision resolved many issues in the case, including the validity and constitutionality of the QSA. Trial on compliance with the California Environmental Quality Act was held in November 2012. A judgment following the December 2012 trial after remand has not been entered. The impact, if any, that the ruling might have on the Water Authority’s water supplies cannot be determined at this time.

On January 28, 2010, the Water Authority was served with a federal complaint filed by the County of Imperial and the Imperial County Air Pollution Control District alleging that execution and implementation of three QSA-related agreements violate the National Environmental Policy Act and federal Clean Air Act. The complaint names the Department of Interior, Secretary of Interior, USBR and Commissioner of Reclamation as defendants, and the Water Authority, MWD, CVWD and IID as real parties in interest. The Water Authority and the other defendants and real parties filed separate answers to the complaint and later intervened as additional defendants. On September 9, 2010, the administrative record was filed with the court. Briefing on cross-motions for summary judgment is underway and should be completed in early 2013. The impact, if any, that the litigation might have on the Water Authority’s water supplies cannot be determined at this time.

Salton Sea Environmental Issues. Implementation of the QSA requires mitigation of the impacts of QSA programs on the Salton Sea. The Salton Sea is an important habitat for a wide variety of fish-eating birds as a stopover spot along the Pacific flyway. Some of these birds are listed as threatened or endangered species under the federal or California Endangered Species Acts (respectively, the “Federal ESA” and the “California ESA” and, collectively, the “ESAs”). Located at the lowest elevations of an inland basin and fed primarily by agricultural drainage with no outflows other than evaporation, the Salton Sea is on a trend towards hyper-salinity, which has already impacted the Salton Sea’s fishery. This fishery has historically been suitable habitat for the fish-eating birds. The transfer of water from IID to the Water Authority will reduce the volume of agricultural run-off from IID into the Salton Sea, which in turn may accelerate the natural trend of the Salton Sea to hyper-salinity. The appropriate mitigation for impacts to the Salton Sea from the Water Authority/IID water transfer and the larger issue of Salton Sea restoration has been addressed by State legislation implementing the QSA. In passing that legislation, the State Legislature committed the State to undertake restoration of the Salton Sea ecosystem. Restoration of the Salton Sea is subject to selection and approval of an alternative by the State Legislature and funding of the associated capital improvements and operating costs. The Secretary of Natural Resources recommended an $8.9 billion preferred alternative for restoration of the Salton Sea to the State Legislature in May 2007. While withholding authorization of the preferred alternative, the State Legislature approved funds from Proposition 84 to undertake demonstration projects and investigations called for in the Secretary’s recommendation.

The primary strategy to mitigate the reduction in inflows resulting from QSA water transfers in the Imperial and Coachella valley was to deliver water to the Salton Sea for a 15 year period from 2003 to 2017. This fifteen year period was intended to allow the State to identify and select a Preferred Alternative for Salton Sea Restoration. Since 2003, however, the State has made only minimal progress toward the Salton Sea’s restoration. With the State facing looming financial challenges, it appears unlikely a State-sponsored restoration plan will be implemented by 2017 as required by the QSA enabling legislation. The Water Authority and IID believe that the failure of the State to make progress toward fulfilling its Salton Sea restoration obligations may jeopardize the effectiveness of existing QSA mitigation measures. In October 2011, the Water Authority and IID filed a joint petition (the “Petition”) with the State Water Resource Control Board (SWRCB) to modify the Salton Sea mitigation requirements. The Petition proposes a plan that provides additional habitat and air quality projects in lieu of delivering 480,000 acre-feet of water from 2014-2017 to the Salton Sea. This water would instead be transferred from IID to MWD and/or the Water Authority to generate revenue to fund the accelerated and supplemental habitat
and air quality mitigation projects. As part of the petition process, environmental review will be required in accordance with the California Environmental Quality Act and the federal National Environmental Protection Act.

QSA Joint Powers Authority. The QSA JPA Agreement, which was executed in October 2003, established the Quantification Settlement Agreement Joint Powers Authority (“QSA JPA”). The purpose of the QSA JPA is to administer the funding of environmental mitigation requirements related to QSA water transfers. The QSA JPA collects, holds, invests, and disburses funds needed for mitigation projects. The QSA JPA is comprised of representatives from the DFW, CVWD, IID and the Water Authority. CVWD, IID, and the Water Authority are required to provide up to $133 million (in 2003 dollars, discounted at six percent per annum) to pay for the QSA mitigation program. Under terms of the QSA JPA Agreement, the collective financial obligation of the three water agencies is capped at $133 million, of which the Water Authority is responsible for $52.2 million (in 2003 dollars). The Water Authority’s obligations are payable from Net Water Revenues subordinate to the Bonds and Contracts and the Subordinate Obligations. To date, the Water Authority has made payments of $2,340,273 in 2003, $1,032,775 in 2004, $1,100,347 in 2005, $1,314,855 in 2006, $5,599,469 in 2007, $4,363,369 in 2008, $8,141,875 in 2009, $2,770,483 in 2010, $3,084,803 in 2011, and $3,496,247 in 2012. Scheduled Water Authority payments beyond 2011 are as follows:
## WATER AUTHORITY PAYMENTS TO QSA JPA

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Payments Due December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$5,245,201</td>
</tr>
<tr>
<td>2014</td>
<td>5,291,989</td>
</tr>
<tr>
<td>2015</td>
<td>6,076,346</td>
</tr>
<tr>
<td>2016</td>
<td>8,254,386</td>
</tr>
<tr>
<td>2017</td>
<td>8,314,814</td>
</tr>
<tr>
<td>2018</td>
<td>6,914,667</td>
</tr>
<tr>
<td>2019</td>
<td>1,060,053</td>
</tr>
<tr>
<td>2020</td>
<td>1,050,836</td>
</tr>
<tr>
<td>2021</td>
<td>3,836,522</td>
</tr>
<tr>
<td>2022</td>
<td>3,849,593</td>
</tr>
<tr>
<td>2023</td>
<td>9,889,722</td>
</tr>
<tr>
<td>2024</td>
<td>3,909,010</td>
</tr>
<tr>
<td>2025</td>
<td>2,057,337</td>
</tr>
</tbody>
</table>

The water agencies are also responsible for providing $30 million (in 2003 dollars) for the Salton Sea Restoration Fund, which is administered by DFW. CVWD and the Water Authority paid their full obligations to this fund in fiscal year ended June 30, 2005 ($8.3 million for CVWD, and $11.8 million for the Water Authority (in 2003 dollars)). IID is paying these funds according to a payment schedule.

See *Quantification Settlement Agreement Related Litigation*.

### Water Purchases from The Metropolitan Water District of Southern California

The Water Authority is a member agency of MWD. MWD was created in 1928, under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended) (the “MWD Act”). MWD’s primary purpose is to provide a supplemental supply of imported water to its member agencies. The MWD service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. There are 26 member agencies of MWD, consisting of 14 cities, 11 municipal water districts and the Water Authority. A Board of Directors, currently numbering 37 members, governs MWD. Each member agency has at least one representative on the MWD’s Board. Representation and voting rights are based upon the assessed valuation of property within each member agency. The Water Authority has four members on the MWD’s Board and its voting entitlement is currently 17.57 percent. The population of the MWD service area is currently estimated to be 18 million people.

The Water Authority is the largest purchaser of water from MWD. In the fiscal year ended June 30, 2012, the Water Authority’s estimated water purchases from MWD represented approximately 17.7 percent of MWD’s total sales. In addition, MWD transported 164,965 acre-feet of water to the Water Authority under its Exchange Agreement with the Water Authority. See discussion under “Quantification Settlement Agreement.”

In the fiscal year ended June 30, 2012, MWD supplied approximately 1.54 million acre-feet of water to its member agencies. MWD faces a number of challenges in providing a reliable and high quality water supply for southern California. These include, among others: (1) population growth within the service area; (2) increased environmental regulations; (3) regulatory restrictions on the operation of the State Water Project (the “SWP”); and (4) variable weather conditions. Supply deficiencies can occur during periods of drought. While MWD plans and manages reserve supplies to account for normal occurrences of drought conditions, increased regulatory restrictions and prolonged droughts may impact MWD’s ability to provide water to its member agencies. See *MWD Water Supply*. 
The MWD Act provides a preferential right for the purchase of water by each of the MWD member agencies. This preferential right is based upon a ratio of all payments made to MWD by each member agency on tax assessments and other payments toward the capital cost and operating expense of MWD, except purchases of water, to all such payments made by all member agencies. Based upon the formula as applied by MWD, as of June 30, 2012 the Water Authority has a statutory preferential right to 17.92 percent of MWD’s total available supply.

It is MWD’s declared policy to meet all the supplemental needs of each of its member agencies, including the Water Authority. Historically, during periods of water supply shortages, the MWD Board has adopted allocation plans to restrict the amount of MWD water supplies to its member agencies to reduce water use. Most recently, MWD adopted a shortage allocation method in February 2008 (the Water Supply Allocation Plan, or “WSAP”) under which MWD allocates water based on reduction by class of water service, with adjustments made for growth, loss of local supply, as defined, declines in demand due to implementation of water conservation, the degree of a member agency’s dependence on MWD for its total water supply, and other water supply related factors. On July 1, 2009, MWD implemented Level 2 of its WSAP and began limiting the allocation of water to its member agencies. In the spring of 2010, MWD extended its mandatory WSAP Level 2 allocation for the fiscal year beginning July 1, 2010. On April 13, 2011, MWD terminated the WSAP Level 2 allocation based on the water supply outlook, improved storage conditions, and reduced water demands. MWD is currently not in allocation. See INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA. MWD is currently not in allocation. See INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA.

**MWD Water Supply**

**Colorado River Water.** Under applicable laws, agreements and treaties governing the use of water from the Colorado River, California is entitled to 4.4 million acre-feet of Colorado River water annually, plus one-half of any surplus that may be available collectively for Arizona, California and Nevada as declared on an annual basis by the United States Secretary of the Interior. Under a priority system that governs the distribution of Colorado River water made available to California, MWD holds the fourth priority right of 550,000 acre-feet per year and a fifth priority right of 662,000 acre-feet per year. MWD’s fourth priority right is within California’s basic annual apportionment of 4.4 million acre-feet; however, the fifth priority right is outside of this entitlement and therefore is not considered a firm supply. (For a description of the priority of various California water users see the chart under **Quantification Settlement Agreement**). Until 2003, MWD had been able to take full advantage of its fifth priority right as a result of the availability of surplus water and apportioned but unused water by other states. However, Arizona and Nevada increased their use of water from the Colorado River, thus reducing the availability of unused apportionment for California. In addition, beginning in 2003, a severe drought in the Colorado River Basin reduced storage in system reservoirs, thus eliminating MWD’s access to surplus water since that time. Prior to 2003, MWD was able to divert approximately 1.2 million acre-feet (its aqueduct capacity) in any year, but since that time, MWD’s Colorado River water deliveries, inclusive of the Water Authority’s QSA water, have been limited to a low of approximately 633,000 acre-feet in 2006 and a high of approximately 1,105,232 acre-feet in 2009. Average annual net deliveries for 2003 through 2011 were approximately 830,300 acre-feet, with annual volumes dependent primarily on availability of unused higher priority agricultural water within California and increasing transfers of conserved water. For 2012, MWD has estimated Colorado River deliveries of 889,000 acre-feet, which includes 168,000 acre-feet of the Water Authority’s QSA supplies. While MWD plans to store an additional 322,000 acre-feet of Intentionally Created Surplus water in Lake Mead in 2012, it incurred 97,000 acre-feet of system and storage losses; 18,000 acre-feet of that loss is attributed to the Colorado River Intentionally Created Surplus storage program.

**Colorado River Aqueduct.** The Colorado River Aqueduct is owned and operated by MWD. Work on the Colorado River Aqueduct commenced in 1933 and water deliveries started in 1941. Additional facilities were completed by 1961 to meet additional requirements of MWD’s member agencies. The Colorado River Aqueduct is 242 miles long, starting at Lake Havasu and terminating at Lake Mathews in Riverside County. After deducting evaporation and seepage losses in transporting and storing the water and considering maintenance requirements, the maximum capacity available for delivery by MWD to its member agencies is approximately 1.2 million acre-feet per year.

**Management of California’s Colorado River Water Supply.** In response to Arizona and Nevada increasing use of their respective apportionments in the late 1990s and the uncertainty of continued surpluses on the Colorado
River, the Colorado River Board of California (“CRB”), in consultation with MWD, IID, the Palo Verde Irrigation District (“PVID”), CVWD, the Los Angeles Department of Water and Power, and the Water Authority, embarked on the development of a plan for reducing California’s use of Colorado River water to its basic annual apportionment of 4.4 million acre-feet (the “California Plan”). In 1999, MWD, IID, CVWD and the State agreed to a set of Key Terms aimed at managing California’s Colorado River supply. These Key Terms were incorporated into CRB’s May 2000 California Plan that proposed to optimize the use of Colorado River supply through water conservation, transfers from higher priority agricultural users to the Water Authority’s and MWD’s service area, and storage programs.

Many of the core elements of the California Plan are being implemented by the QSA. The QSA establishes Colorado River water use limits for IID, CVWD and MWD, provides for specific acquisitions of conserved water and water supply arrangements, for up to 75 years for the Water Authority-IID water transfer and other transfers, and 110 years for the canal lining water, and allows MWD to take surplus water pursuant to the terms of the Interim Surplus Guidelines. The QSA also allows MWD to enter into other cooperative Colorado River supply programs, modify existing conservation and cooperative water supply agreements consistent with the QSA, and set aside several disputes among California’s Colorado River water agencies. See Quantification Settlement Agreement for a discussion of the Water Authority’s QSA supplies.

**MWD Colorado River Supply Programs.** MWD has taken steps to increase its access to Colorado River water through agreements with agencies that have higher priority rights to the water. Under the 1988 Conservation Agreement between MWD and IID, IID constructed conservation projects that are providing 105,000 acre-feet of conserved water per year to MWD. Under the QSA, MWD agreed to forgo up to 20,000 acre-feet of this water for CVWD’s use. In 1992, MWD entered into an agreement with the Central Arizona Water Conservation District (“CAWCD”) to demonstrate the feasibility of CAWCD storing Colorado River water in central Arizona for the benefit of an entity outside of Arizona. In August 2004, MWD and PVID entered into a Land Management Crop Rotation and Water Supply Program. This program produces up to 133,000 acre-feet of water to MWD in certain years. MWD water conservation programs with the agricultural agencies were made possible through the quantification of water under the QSA and are dependent on the continuation of the QSA and the accounting of Colorado River water that it makes possible. In October 2004, MWD entered into a storage and interstate release agreement with Southern Nevada Water Authority (“Nevada”). Under this program, Nevada can request MWD to store unused Nevada apportionment in California. As part of a recently executed amendment, it is expected that Nevada will not request return of this water before 2022. The stored water provides flexibility to MWD for blending Colorado River water with State Water Project water and improves near-term water supply reliability. In November 2012, MWD authorized execution of agreements for international pilot project with Mexico that could produce 47,500 acre-feet of the water supply. The project is contingent upon execution of a clarifying agreement to the existing treaty between the United States and Mexico regarding the Colorado River, and other related agreements.

**Colorado River Operations, Shortage, and Surplus Guidelines.** In December 2007, the Secretary of the Interior executed a Record of Decision (“ROD”) for guidelines that determine potential shortage allocations among the Lower Basin states and revise reservoir operations (Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead). Under the guidelines, California would not have to share in any of the potential annual shortages identified by the Secretary up to 500,000 acre-feet. The ROD also extended existing Interim Surplus Guidelines (“ISG”) until 2026, which determine when surplus water is available for California, Arizona and Nevada. Availability of ISG surplus water depends upon whether drought conditions continue and how fast storage in the Colorado River Basin can recover from present conditions. The ROD also provided a way for Lower Basin Colorado River water contractors and others to create a storage account, under a program called Intentionally Created Surplus (“ICS”). Under ICS provisions, MWD can implement water conservation programs to create a storage account in Lake Mead of up to 1,500,000 acre-feet. When other surplus is not available and the Colorado River is not in shortage condition, MWD could call for the delivery of 375,000 acre-feet of this stored water in any year (400,000 acre-feet if water were needed to avoid shortages within the MWD service area). As of January 2012, MWD has approximately 435,000 acre-feet in its ICS accounts, comprised of water conserved by fallowing in the Palo Verde Valley and from the yield allocated to MWD from the Drop 2 Reservoir Project and the Yuma Desalter pilot run.
From October 2011 through September 2012, precipitation in the Colorado River Basin was 73 percent of normal. On May 1, 2012, Upper Colorado River Basin snowpack measured 75 percent of normal with the annual runoff into Lake Powell at 2.1 million acre-feet or 29 percent of average. This followed a prolonged drought in the Upper Colorado River Basin from 2000 through 2010 with average annual runoff of 69 percent of normal. In December 2011, Lake Mead’s elevation reached 1,133 feet, or 56 percent full. With continued dry conditions, as of October 8, 2012, Lake Mead’s elevation dropped to about 1,115 feet. Each ten-foot elevation change in Lake Mead’s elevation represents approximately 1 million acre-feet of storage.

Environmental Considerations. Several fish species and other wildlife species either directly or indirectly have the potential to affect Colorado River operations, thus changing power operations and the amount of water deliveries to the Colorado River Aqueduct. A number of species that are on either “endangered” or “threatened” lists under the Federal ESA or the California ESA are present in the area of the Lower Colorado River. To address this issue, a broad-based state/federal/tribal/private regional partnership, which includes water, hydroelectric power and wildlife management agencies in Arizona, California and Nevada, developed a multi-species conservation plan for the main stem of the Lower Colorado River (the Lower Colorado River Multi-Species Conservation Program or “MSCP”). The MSCP allows MWD to obtain federal and state permits for any incidental take of protected species resulting from current and future water and power operations and diversions on the Colorado River. The MSCP also covers operations of federal dams and power plants on the Colorado River.

Seismic Considerations. Portions of the Colorado River Aqueduct are located near earthquake faults, including the San Andreas Fault. The five pumping plants on the Colorado River Aqueduct have been buttressed to better withstand seismic events. Other components of the Colorado River Aqueduct are monitored for any necessary rehabilitation and repair. Supplies are dispersed throughout MWD’s service area, and a six-month reserve supply of water normally held in local storage provides reasonable assurance of continuing water supplies during seismic events. MWD has developed an emergency plan that calls for specific levels of response appropriate to an earthquake’s magnitude and location. However, no assurance can be made that a significant seismic event would not cause damage to project structures, which could thereby interrupt the supply of water from the Colorado River Aqueduct.

State Water Project. MWD’s other major source of water is the SWP. The SWP is owned by the State and operated by the State Department of Water Resources (“DWR”). The SWP transports Feather River water stored in and released from Oroville Dam and unregulated flows diverted directly from the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (“Bay-Delta”) south via the California Aqueduct to four delivery points near the northern and eastern boundaries of MWD. The total length of the California Aqueduct is 444 miles.

MWD is one of 29 agencies that have long-term contracts for a water supply with DWR. MWD is the largest of the 29 agencies in terms of the population it serves (approximately 18 million), the share of SWP water to which it is entitled, and the total amount of annual payments made to DWR. MWD’s water supply contract with DWR provides for the delivery of 1,911,400 acre-feet per year, or 46 percent of project deliveries. MWD also has a “call” on 100,000 acre-feet per year of water transferred to CVWD and the Desert Water Agency, if needed, and is required to pay for the financial obligations associated with that water supply during the call period.

The SWP was originally intended to produce 4.2 million acre-feet of water supply annually. The first SWP facilities were completed in the early 1970s; at that time, it was envisioned that additional facilities would be constructed as the demand for SWP water increased. Several factors, including public opposition and increased costs, combined to delay the construction of additional facilities. The quantity of SWP water supply available for delivery each year is determined by both hydrology and operational considerations. Water supplies received from the SWP by MWD from 2002 through 2012, including water from water transfer, groundwater banking and exchange programs, varied from a low of 908,000 acre-feet in calendar year 2009 to a high of 1,800,000 acre-feet in calendar year 2004. MWD’s water supply from the SWP for calendar year 2012 was 65 percent of its contracted amount, or 1,242,000 acre-feet. In 2012, MWD took delivery of approximately 1.08 million acre-feet of water supply that was sold to its member agencies plus approximately 224,000 acre-feet of water that was stored in its Central Valley groundwater and Colorado River storage programs. This includes SWP water supplies from turn-back pool purchases, San Bernardino Valley Municipal Water District purchase, and Port Hueneme water supplies delivered through the California Aqueduct.
Due to water supply conditions and the court-ordered restrictions described under **Endangered Species Act Considerations** below, then-California Governor Arnold Schwarzenegger issued Executive Order S06-08, which proclaimed a statewide drought and ordered executive branch entities to take immediate action to address the water shortage. On June 12, 2008, Governor Schwarzenegger proclaimed a State of Emergency for nine Central Valley counties because the drought had caused conditions of extreme peril to the safety of persons and property. On February 27, 2009 the Governor proclaimed a State of Emergency for the entire state. As a result of improved water supply conditions and storage levels on the SWP, on March 31, 2011, California Governor Jerry Brown proclaimed the end of the drought.

For calendar year 2012, DWR’s initial water supply allocation to the contractors was estimated and set at 60 percent of contracted amounts. This estimate was reduced to 50 percent on February 21, 2012, and later adjusted upward to 60 percent by April 16, 2012. The allocation was increased on May 23, 2012 to 65 percent of contracted amounts due to wet weather in April. In 2012, the revised allocation, and other water transfers and exchanges made available to MWD 1,302,000 acre-feet of water from the SWP.

**Bay-Delta Regulatory and Planning Activities.** The water supply and reliability challenges affecting the SWP are largely a result of longstanding environmental issues in the Bay-Delta estuary. In addition to its importance to urban and agricultural water users, the Bay-Delta is of critical ecological importance. The Bay-Delta is the largest estuary on the West Coast of the United States and provides habitat for more than 750 plant and animal species. One hundred fifty years of human activity have contributed to the destruction of habitat, the decline of several estuarine and anadromous fish species, and the deterioration of water quality. These activities have historically included increasing water demands from urban and agricultural water uses, the dredging and filling of tidal marshes, the construction of levees, urban runoff, wastewater discharges, agricultural drainage, runoff from abandoned mines, and the introduction of non-native species.

The State Water Resources Control Board (“SWRCB”) is the agency responsible for setting water quality standards and administering water rights throughout California. SWRCB decisions can affect the availability of water to MWD and other users of SWP water. SWRCB exercises its regulatory authority over the Bay-Delta by means of public proceedings leading to regulations and decisions. These include the Bay/Delta Water Quality Control Plan (“WQCP”), which establishes the water quality standards and proposed flow regime of the estuary, and water rights decisions that assign responsibility for implementing the objectives of the WQCP to users throughout the system by adjusting their respective water rights. Since 2000, the SWRCB’s Water Rights Decision 1641 has governed the SWP’s ability to export water from the Bay-Delta for delivery to MWD and other SWP contractors. Currently, the SWRCB is reviewing San Joaquin River flows and southern Delta salinity as well as potential modifications to the 2006 Bay-Delta Plan and its implementation.

The CALFED Bay-Delta Program was a collaborative effort among state and federal agencies to develop a long-term solution to improve water supplies in California and the health of the Bay-Delta watershed. In August 2000, the federal government and the State issued a ROD and related documents approving the final programmatic environmental documentation for the CALFED Bay-Delta Program. Implementing the CALFED Bay-Delta Program during the first seven years resulted in investment of $3 billion on a variety of projects and programs to begin addressing the Bay-Delta’s water supply, water quality, ecosystem, and levee stability problems. To guide future development of the CALFED Bay-Delta Program and identify a strategy for managing the Bay-Delta as a sustainable resource, then-Governor Schwarzenegger in September 2006 established, by Executive Order, a Delta Vision process. The Delta Vision process is tied to legislation that created a cabinet-level committee tasked with developing a strategic vision for the Delta. The 41-member Delta Vision Blue Ribbon Task Force issued its Delta Vision Strategic Plan (the “Strategic Plan”) on October 17, 2008, providing its recommendations for long-term sustainable management of the Bay-Delta. The Strategic Plan was reviewed by the Delta Vision Committee, chaired by the State Secretary for Natural Resources. The Implementation Report summarizing the Delta Vision Committee’s recommendations was submitted to then-Governor Schwarzenegger on December 31, 2008. These recommendations include completing the Bay-Delta Conservation Plan (“BDCP”) and associated environmental assessments to permit ecosystem revitalization and water conveyance improvements, identifying and reducing stressors to the Bay-Delta ecosystem, strengthening levees, increasing emergency preparedness, continuing funding for the CALFED ecosystem restoration program, updating Bay-Delta regulatory flow and water quality standards to protect beneficial uses of water and working with the State Legislature on a comprehensive water bond package to fund Bay-Delta infrastructure projects.
On November 4, 2009, the State Legislature passed a comprehensive package of water legislation that included five bills addressing California’s statewide water situation, with particular emphasis on the Bay-Delta. The water legislation signed into law (the “2009 State Water Legislation”) includes, among other things, a 20 percent water conservation mandate for most localities in the State by 2020, new regulations regarding voluntary monitoring of groundwater levels by localities, and an $11.14 billion State general obligation bond measure that would provide funding for projects and programs throughout the State and in the Bay-Delta. Major categories of bond funding would include statewide water system operational improvements, Bay-Delta sustainability, water supply reliability, conservation and watershed protection, groundwater protection and water quality improvements, and water recycling and water conservation. The bond measure was scheduled to be included on the November 2010 ballot, but the State Legislature postponed the bond election first, to 2012, and subsequently, to 2014. It is widely believed that the bond measure will be restructured and reduced in size prior to being presented to the voters. Delaying the bond election did not impact other parts of the 2009 State Water Legislation.

The 2009 State Water Legislation also directed that the Bay-Delta be managed with the dual goals of water supply reliability and ecosystem protection. It created two new governmental agencies – the Sacramento-San Joaquin Delta Conservancy and the Delta Stewardship Council. The Sacramento-San Joaquin Delta Conservancy will implement ecosystem restoration activities in the Bay. The Delta Stewardship Council, formed in February 2010, is CALFED’s successor agency; it was directed to adopt and oversee implementation of a comprehensive management plan for the Bay-Delta by January 1, 2012. On November 30, 2012, the Delta Stewardship Council released the final draft Delta Plan and recirculated an additional volume of the Draft Programmatic Environmental Impact Report (DPEIR) describing environmental impacts of the final draft Delta Plan. Adoption of the Delta Plan is scheduled for early 2013. The working draft BDCP was completed in November 2010 and a full public draft BDCP is scheduled for early 2013. In July 2012, Governor Jerry Brown, U.S. Interior Secretary Ken Salazar and National Oceanic and Atmospheric Administration (NOAA) Assistant Administrator for Fisheries Eric Schwaab outlined revisions to the proposed BDCP that, along with alternative proposals, will undergo public environmental review. Key elements of the working draft BDCP include the construction of a double-bore tunnel to move water 35 miles under the Delta to the state and federal aqueducts. The tunnels will have a combined capacity to carry up to 9,000 cubic feet per second—down from an earlier proposal of 15,000 cubic feet per second, when water is available in the Sacramento River. The operations would be phased in over several years and the conveyance design using gravity flow would maximize energy efficiency and minimize environmental impact. The conveyance portion of the project is planned to be funded by the water ratepayers of the SWP and CVP contractors. The final BDCP and environmental impact reports are scheduled for completion by 2013. At this time, the Water Authority cannot predict what effect the 2009 State Water Legislation will have on the operations and finances of the Water Authority.

Endangered Species Act Considerations. The listing of several fish species as threatened or endangered under the Federal ESA or the California ESA have adversely impacted SWP operations and limited the flexibility of SWP operations. Currently, five species (the winter-run and spring-run Chinook salmon, Delta smelt, North American green sturgeon and Central Valley steelhead) are listed under the ESAs. In addition, on June 25, 2009, the DFW Commission declared the longfin smelt a threatened species under the California ESA. The Federal ESA requires that before any federal agency authorizes funds or carries out an action it must consult with the appropriate federal fishery agency to determine whether the action would jeopardize the continued existence of any threatened or endangered species, or adversely modify habitat critical to the species’ needs. The result of the consultation is known as a “biological opinion.” In the biological opinion the federal fishery agency determines whether the action would cause jeopardy to a threatened or endangered species or adverse modification to critical habitat and recommends reasonable and prudent alternatives or measures that would allow the action to proceed without causing jeopardy or adverse modification. The biological opinion also includes an “incidental take statement.” The incidental take statement allows the action to go forward even though it will result in some level of “take,” including harming or killing some members of the species, incidental to the agency action, provided that the agency action does not jeopardize the continued existence of any threatened or endangered species and complies with reasonable mitigation and minimization measures recommended by the federal fishery agency.

In 2004 and 2005, the United States Fish and Wildlife Service (“USFWS”) and National Marine Fisheries Service (“NMFS”) issued biological opinions and incidental take statements that govern operations of the SWP and the federal CVP with respect to the Delta smelt, the winter-run and spring-run Chinook salmon and the Central Valley steelhead.
In July 2006, the USBR reinitiated consultation with the USFWS and NMFS with respect to the 2004 and 2005 biological opinions (with the addition of the North American green sturgeon, which was listed in April 2006) following the filing of legal challenges to those biological opinions and incidental take statements. Under the Federal ESA, critical habitat also must be designated for each listed species. Critical habitat has been designated for each of the currently listed species, including the North American green sturgeon.

On May 25, 2007, U.S. District Judge Oliver Wanger invalidated the Delta smelt biological opinion that had guided the SWP and CVP operations and ordered a new biological opinion be developed. In December 2007, Judge Wanger issued an injunction that reduced pumping from the end of December, when the fish are ready to spawn, until June, when the smelt typically move away from the pumps. The ruling caused significant reductions in water exports by the SWP and CVP in 2008. In December 2008, USFWS issued a new Delta smelt biological opinion. MWD along with other agencies and interested parties filed separate lawsuits in federal district court challenging the biological opinion, which the federal court consolidated under the caption Delta Smelt Consolidated Cases. On December 14, 2010, Judge Wanger issued a decision on summary judgment finding that there were major scientific and legal flaws in the Delta smelt biological opinion and remanding the biological opinion to the USFWS for reconsideration. The court’s decision invalidates some of the restrictions on the SWP operations contained in the Delta smelt biological opinion. On May 4, 2011, Judge Wanger issued a decision directing the USFWS to complete a new draft biological opinion by October 1, 2011 and to complete a final biological opinion with environmental documentation by December 1, 2013.

On June 4, 2009, the NMFS released its new biological opinion for salmonid species. The salmonid species biological opinion contains additional restrictions on SWP and CVP operations. Six lawsuits have been filed challenging the 2009 salmon biological opinion, which the court consolidated under the caption Consolidated Salmon Cases. On May 25, 2010, the court granted the plaintiffs’ request for preliminary injunction in the Consolidated Salmon Cases, which restrained enforcement of two requirements that limit exported water during the spring months. Hearings on motions for summary judgment were held on December 16, 2010. On September 20, 2011, Judge Wanger granted a motion for summary judgment, finding that the salmon biological opinion was flawed and that some of the restrictions in the biological opinion were arbitrary and capricious. On December 12, 2011, U.S. District Judge Lawrence J. O’Neill who was assigned to the case after Judge Wanger’s retirement, issued a final judgment in the Consolidated Salmon Cases. The final judgment remands the 2009 biological opinion to the NMFS, and directs that a new draft salmon biological opinion be issued by October 14, 2014, and that a final salmonid biological opinion be issued by February 1, 2016.

On November 13, 2009, the Center for Biological Diversity filed separate lawsuits challenging the failure by USFWS to respond to a petition to change the Delta smelt’s federal status from threatened to endangered and denial of its petition for federal listing for the longfin smelt. An agreement settling the longfin smelt litigation was approved on February 2, 2011. Under the agreement, the USFWS agreed to complete a rangewide status review of the longfin smelt and consider whether the Bay-Delta longfin smelt population, or any other longfin smelt population from California to Alaska, qualifies as a “distinct population” that warrants federal protection. On April 2, 2012, the USFWS issued its finding that the Bay-Delta longfin smelt population warrants protection under the ESA but is precluded from listing as a threatened or endangered species by the need to address other higher priority listing actions. The finding includes the determination that the Bay-Delta longfin smelt will be added to the list of candidates for ESA protection, to be reviewed annually.

Further hearings will be held on the biological opinion regarding salmon. In addition, the lawsuit by the Center for Biological Diversity challenging the federal government’s decision not to list the longfin smelt as endangered remains pending. Should the federal government lose that lawsuit, restrictions on pumping to protect the longfin smelt may be implemented that could erase any gains in water supply availability resulting from Judge Wanger’s 2010 decision.

In addition to the Federal ESA litigation, other environmental groups sued DWR on October 4, 2006 in the Superior Court of the State of California alleging that DWR was “taking” listed species without authorization under the California ESA. This litigation (Watershed Enforcers, a project of the California Sportfishing Protection Alliance v. California Department of Water Resources) requested that DWR be ordered to either cease operation of the SWP pumps, which deliver water to the California Aqueduct, in a manner that results in such “taking” of listed species or obtain authorization for such “taking” under the California ESA. On April 18, 2007, the Superior Court issued its Statement of Decision finding that DWR was illegally “taking” listed fish through operation of the SWP
export facilities. The Superior Court ordered DWR to “cease and desist from further operation” of those facilities within 60 days unless it obtained take authorization from the DFW. DWR appealed the order on May 7, 2007. The Court of Appeal subsequently issued a decision finding that DWR was a “person” under the California ESA and subject to its take prohibitions. The State Water Contractors and Kern County Water Agency have filed suit in state court challenging the Consistency Determinations under the California ESA that have been issued for both Delta smelt and salmon. Those lawsuits challenging the Consistency Determinations are pending.

State Water Project Operational Constraints. DWR has altered the operations of the SWP to accommodate species of fish listed under the ESAs. These changes in project operations have adversely affected SWP deliveries, estimated to be as much as one million acre-feet in an average year, 0.3 million acre-feet in a critically dry year and 1.3 million acre-feet in an above-average water year. MWD took delivery of 1,302,000 acre-feet of water in 2012, including its basic allocation and supplies from water transfers and exchanges that were delivered through the California Aqueduct. DWR reported that approximately 285,000 acre-feet of water was not available from the SWP for calendar year 2011 as a result of pumping restrictions. The initial water supply allocation to SWP contractors for 2013 is 30 percent of the contracted amounts, based on existing storage in SWP reservoirs and regulatory agency restrictions on water exports from the Bay-Delta to protect listed fish species. DWR revises its water supply allocation as conditions change.

Operational constraints are likely to remain in place until a long-term solution to the problems in the Bay-Delta is identified and implemented. New litigation, listings of additional species or new regulatory requirements could further adversely affect future SWP operations by requiring additional export reductions, releases of additional water from storage or other operational changes impacting water supply availability. The Water Authority cannot predict the ultimate outcome of any of the litigation or regulatory processes described above but believe they could have a materially adverse impact on the availability and cost of SWP and MWD water supplies.

Seismic Considerations. Major portions of the California Aqueduct are located parallel to and near the San Andreas and other faults. All major faults are crossed either by canal at ground level or by pipeline at very shallow depths to ease repair in case of damage from movement along a fault. SWP facilities are designed to withstand earthquakes without major damage. Dams, for example, are designed to accommodate movement along their foundations and to resist earthquake forces on their embankments. Earthquake loads have been taken into consideration in the design of project structures such as pumping and power plants. The location of check structures on the canal allows for hydraulic isolation of the fault-crossing repair. No assurance can be made that a significant seismic event would not cause damage to SWP structures and interrupt the water supply available from the SWP.

Integrated Water Resources Plan. MWD’s “Integrated Water Resources Plan” (the “MWD IRP”) was adopted by the MWD Board in January 1996 as a long-term planning guideline for water resources and capital investments. The purpose of the MWD IRP was to develop a “preferred resource mix” to meet 100% of the water supply reliability and water quality needs of the region in a cost-effective and environmentally sound manner. In 2004, MWD’s Board adopted an updated MWD IRP that added a proposal for a “planning buffer” to develop an additional 500,000 acre-feet of water to address “uncertainty” in future water supply availability. In October 2010, MWD’s Board adopted a second MWD IRP update that recommended an “Adaptive Management” approach and a third category of water supply development called, “Foundational Actions.” The Water Authority and its representatives on the MWD board have urged MWD to update the MWD IRP to take into account material, changed circumstances including a substantially reduced demand for MWD water supplies.

Additional MWD Water Supplies. MWD has a number of water transfer and storage and exchange programs with state, federal, public and private water districts and individuals in order to augment its imported water supplies. MWD has entered into groundwater basin storage agreements with the Arvin Edison Water Storage District and Semitropic Water Storage District, an agreement with San Bernardino Valley Municipal Water District to coordinate the use of facilities and SWP supplies and groundwater banking and exchange transfer agreements with the Kern Delta Water District, the Mojave Water Agency, CVWD and the Desert Water Agency. In the fall of 2008, DWR convened the State Drought Water Bank as a one-year program to help mitigate water shortages in 2009. MWD purchased 36,900 acre-feet (before carriage and conveyance losses) of water through the bank. In addition, for calendar year 2010, MWD participated with other State Water Contractors to purchase 88,137 acre-feet (before carriage and conveyance losses); MWD also entered into two transactions with Westlands Water District and San Luis Water District. Under the first transaction, MWD purchased 18,453 acre-feet; in the second, MWD accepted delivery of 110,692 acre-foot stored in San Luis Reservoir and returned up to two-thirds of that amount.
from MWD’s SWP supply in 2011 for a net water purchase of about 37,000 acre-feet. MWD also entered into an agreement with DWR, in December 2007, to purchase a portion of the water released by the Yuba County Water Agency (“YCWA”); MWD’s agreement allows MWD to purchase at least 13,750 acre-feet to 35,000 acre-feet per year of water supplies in dry years through 2025. For calendar years 2008, 2009 and 2010, MWD purchased 26,430 acre-feet, 42,915 acre-feet and 67,068 acre-feet of water, respectively, from YCWA under this program. YCWA did not offer water for sale in calendar year 2011[ or 2012].

MWD Storage. MWD’s SWP contract allows for the purchase of up to 1.9 million acre-feet of water per year. The availability of SWP water depends on hydrologic conditions – more water is available in wet years and less in dry years. MWD purchases and stores water in wet years for later use in dry years. MWD’s storage capacity, which includes reservoirs, conjunctive use and other groundwater storage programs within its service area and groundwater and surface storage accounts delivered through the SWP or CRA, is 5.83 million acre-feet. In July 2006, MWD had 2.74 million acre-feet of water stored in its various facilities and accounts, including emergency supplies. Of this, approximately 626,000 acre-feet is emergency storage that is reserved for use in the event of supply interruptions from earthquakes or similar emergencies. Since 2007, MWD has used water in storage to meet the dry-year water supply needs of its member agencies. By the end of 2010, as a result of more favorable conditions on the SWP, aggressive water conservation at the retail level and higher MWD water rates, the demand for MWD’s water has decreased significantly and its storage levels have increased considerably.

See INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA.

Current Water Supply Outlook

Water supply conditions for the Water Authority’s primary supply sources have been highly variable over the past several years. California experienced a multi-year drought from 2007 until early 2010, when hydrologic conditions returned to near normal. Weather conditions continued to improve into 2011, which turned out to be a very wet year. Key reservoirs filled to capacity across the state, providing carryover storage for a very dry 2012 that followed. Similarly, the Colorado River Basin also experienced a series of dry years, interrupted by a very wet 2011, which was also followed by an extremely dry 2012. Inflow into Lake Powell in water year‡ 2012 was just 45 percent of average, placing it as the third lowest on record since 1963. In spite of the dry conditions in 2012, the SWP and Colorado River Basin supply outlook for 2013 remains optimistic in the near term.

Early winter storms in December brought welcome relief across the State, with above average rainfall and snowpack that helped replenish reservoir storage. The DWR increased the initial State Water Project Table A allocation from 30 to 40 percent on December 21, 2012, following these early storms. Lake Oroville, the principal reservoir on the SWP, is now at 70 percent of capacity, which is approximately 112 percent of average. In southern California, MWD’s storage reserve levels are projected to be at an all-time high of 2.7 million acre-feet at the beginning of 2013. Locally, cumulative winter reservoir storage levels continue to rise with storage at a ten year (2002-2011) historical average in mid-December. On the Colorado River Basin, snowpack conditions have also shown marked improvement compared to last year, but continue to be below the long-term average. Although the beginning of the winter season is off to a good start, it is still too early to determine if 2013 will be a wet or a dry year.

Future Water Supply

The Water Authority’s supply planning strategy was developed and continues to be implemented in cooperation with its member agencies. As part of its strategic supply planning process, the Water Authority produces several long-range planning documents. The Water Authority’s Urban Water Management Plan (“UWMP”), is a comprehensive document that includes long-term water demand projections for the San Diego region and a preferred mix of future supplies necessary to meet those demands through the year 2035. This preferred mix reflects the Water Authority Board policy to diversify supplies required to meet future water needs and increase supply reliability through local agency control. The 2010 UWMP was approved by the Water

‡ A water year extends from October 1st through September 30th of the following calendar year.
Authority’s Board in June 2011. Individual components of the projected water supply mix contained in the 2010 UWMP include: supplies from MWD, long-term water transfers from conserved IID agricultural water, water savings from the lining of the All-American Canal and Coachella Canal, local seawater desalination, surface water, and continued development of recycled water and groundwater. Additionally, the Water Authority will continue to support water conservation as an important part of its supply diversification strategy. The Water Authority’s conservation efforts are intended to reduce demand for imported water, demonstrate a continued commitment to the conservation Best Management Practices, and assist member agencies in complying with the per-capita water use reduction required under the 2009 State Water Legislation. See MEMBER AGENCY WATER USAGE - Per Capita Water Use.

**Supply Diversification.** To ensure a reliable supply of water to meet growing water demands, the Water Authority and its member agencies are implementing long-term strategies designed to diversify the region’s supply portfolio and reduce reliance on a single water supplier. These strategies are outlined in the 2010 UWMP and can only be achieved through a collaborative partnership between the Water Authority and its member agencies.

As stated in the 2010 UWMP, development of local supplies plays a critical role in meeting future demands. The Water Authority and its member agencies are taking steps to develop and manage local surface water, groundwater, recycled water and seawater desalination supplies that together are projected to account for roughly 20 percent of total supplies by the year 2035. In addition to these efforts, continuation of the region’s conservation measures will help to offset the need for more expensive water supplies by maximizing efficient use of existing water resources.

Seawater desalination is a key component of the Water Authority’s supply diversification strategy. Development of seawater desalination in San Diego County will assist the region in diversifying its water resources, reduce dependence on imported supplies, and provide a new drought-proof, locally treated water supply. The Water Authority’s seawater desalination efforts include the Carlsbad Project, the potential Camp Pendleton Seawater Desalination Project (the “Camp Pendleton Project”) and the potential Rosarito Beach Desalination Plant (the “Rosarito Project”).

The Carlsbad Project. The Carlsbad Project is a seawater desalination plant and conveyance pipeline currently being developed by Poseidon Resources (Channelside) LP (“Poseidon”), a subsidiary of Poseidon Water LLC, which develops water and wastewater infrastructure. The Carlsbad Project, located on an approximately 6-acre parcel adjacent to the Encina Power Station in Carlsbad, California, has been in development since 1998 and has been incorporated into the Water Authority’s supply and facility planning documents including the 2003 Water Facilities Master Plan and the 2005 and draft 2010 Urban Water Management Plans. When completed, the Carlsbad Project is anticipated to provide a reliable local supply of up to 56,000 acre-feet per year for the region.

On November 29, 2012, the Water Authority Board of Directors approved a 30-year Desalination Water Purchase Agreement between the Water Authority and Poseidon. The Desalination Water Purchase Agreement obligates Poseidon to design, construct and test the desalination plant in accordance with the standards and design requirements set forth therein. Poseidon has entered into a Desalination Facility Engineering, Procurement and Construction Agreement (the “Plant EPC Contract”) with Kiewit Shea Desalination, a joint venture of Kiewit Infrastructure West Co. and J.F. Shea Construction Company. The Plant EPC Contract provides for the design, engineering, procurement, construction, start-up, commissioning and testing of the Plant. IDE Americas, a subsidiary of IDE Technologies, Ltd., an international provider of design, construction, and operation services for desalination plants, was selected by Poseidon to be the desalination process subcontractor for the Carlsbad Project. Poseidon has also entered into an Operation, Maintenance, Repair and Replacement Agreement, dated December 20, 2012, with IDE Americas providing for the operation, maintenance, repair and replacement of the desalination plant during a 30-year operating period. The Board also approved a Design-Build Agreement for Product Water Pipeline Improvements Relating to the Carlsbad Seawater Desalination Project, dated December 20, 2012 (the “Desalination Pipeline DBA”), by and between the Water Authority and Poseidon, providing for the construction of a 10-mile pipeline to connect the Carlsbad Project to the Water Authority’s aqueduct system (“the Desalination Pipeline”).

Following the commencement of commercial operation of the Carlsbad Project, the Desalination Water Purchase Agreement obligates the Water Authority to purchase from Poseidon, and obligates Poseidon to sell to the Water Authority, all of the product water produced by the Carlsbad Project meeting the Water Authority’s quality standards. The Water Authority has agreed to purchase annually from the Carlsbad Project, following
commencement of commercial operation, a minimum of 48,000 acre-feet of product water meeting such quality standards, subject to availability of qualifying water from the Carlsbad Project. The Water Authority may request that Poseidon supply to the Water Authority up to an additional 8,000 acre-feet of water annually from the Carlsbad Project, a total that would account for roughly one-third of all water generated within the Water Authority service area. Two Water Authority member agencies, Vallecitos Water District and Carlsbad Municipal Water District, may purchase a combined total of 6,000 acre-feet of the desalinated water from the Water Authority as their own local supply under separate agreements with the Water Authority.

The Water Authority will make a number of improvements to its aqueduct system and the Twin Oaks Valley Water Treatment Plant to integrate desalinated water into the Water Authority’s aqueduct system. The Water Authority improvements are expected to cost approximately $80 million, which the Water Authority will fund from monies on hand. See FINANCIAL OPERATIONS – Financial Commitments Related to the Carlsbad Project. The Carlsbad Project is expected to commence commercial operations in early 2016.

**The Camp Pendleton Project.** In December 2009, the Water Authority, in collaboration with Marine Corps Base Camp Pendleton, completed a feasibility study for a potential 50 to 150 million gallons-per-day ("MGD") (56,050 to 168,150 acre-feet per year) regional seawater desalination project on Camp Pendleton focusing on two possible seawater desalination plant sites in the southwest corner of the base near the mouth of the Santa Margarita River. The feasibility study provided an analysis on new facilities, environmental and permitting requirements, cost estimates, and implementation issues. Based on the feasibility study, further technical studies were initiated to investigate and refine key components of the potential project including intake and discharge, site layout, treatment plant configuration and product water conveyance and distribution.

A Memorandum of Understanding ("MOU") between the Water Authority and the Marine Corps Base Camp Pendleton was executed in April 2010. The MOU covers further study and planning for the potential project. The MOU facilitates base access and defines the roles and responsibilities of the base, the Water Authority, and its consultants in conducting various technical studies for the project.

These various technical and planning studies on the project, which include geologic, hydrogeologic and marine environment investigations, are expected to be complete by early 2013. Results from the studies will be used to refine the capital and operating costs for the project and will be incorporated into the Water Authority’s Regional Water Facilities Optimization and Master Plan Update. If the Water Authority decides to implement the project, it is anticipated be on-line after 2020.

**The Rosarito Project.** The Water Authority is participating with U.S. and Mexican agencies in a review of potential water management and water supply programs that could benefit Colorado River water users of both countries. As part of this effort, the evaluation and preliminary design of an initial 25 MGD (expandable to 50 MGD) seawater desalination plant that would be located at Rosarito Beach in Baja California, Mexico is being pursued. U.S. water agencies, including the Water Authority, MWD, Southern Nevada Water Authority, and the Central Arizona Water Conservation District began a feasibility evaluation of the plant in 2010. U.S. agencies funded this work, with technical assistance from Mexican federal, state, and local water agencies. The Water Authority served as project manager for the first stage of the project.

The project is scheduled to be implemented in four phases, with a “go” or “no go” decision being made at the end of each phase. The first phase was competed in March 2010. The first phase confirmed that the site and the existing infrastructure were adequate to support up to a 50 MGD seawater desalination facility. The second phase of the project will confirm conceptual treatment process requirements, confirm plant size and physical layout, further assess permitting and regulatory issues, and define full-scale plant costs. The Water Authority’s Board approved funding for the second phase of the study in January 2011. In 2012, Mexican agencies funded and completed a study of potential water conveyance routes from the Rosarito Beach plant site to alternative locations on the U.S. border, which could be used to serve plant product water to U.S. users.

Currently, the Rosarito Beach Desalination Project is considered a conceptual-level project. If built, product water from the plant would be available to both U.S. and Mexican water users. For U.S. water users, the water could be delivered either directly to the San Diego region, using a cross-border pipeline, or possibly by
exchange, with Mexican users taking delivery of the product water and leaving an equivalent amount of Colorado River water available for U.S. users.

Projected 2035 Water Supply. The Water Authority will continue to pursue seawater desalination and other cost competitive supply diversification opportunities. The Water Authority and its member agencies’ projected water supply mix for 2035 is listed as follows:

<table>
<thead>
<tr>
<th>WATER AUTHORITY SERVICE AREA</th>
<th>2035 WATER SUPPLY MIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource</td>
<td>Percentage Goal</td>
</tr>
<tr>
<td>MWD</td>
<td>36%</td>
</tr>
<tr>
<td>IID Transfer</td>
<td>22%</td>
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<tr>
<td>Conservation</td>
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<tr>
<td>Seawater Desalination</td>
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<td>Canal Lining Transfer</td>
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<td>Local Surface Water</td>
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<tr>
<td>Groundwater</td>
<td>3%</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>6%</td>
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<td></td>
<td>100%</td>
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</table>

Source: Water Authority 2010 Urban Water Management Plan

Climate Change. Although not required by the DWR for the 2010 UWMP, evaluation of potential climate change impacts on water demand represents a prudent water resources planning exercise. However, definitive projections on the timing and magnitude of climate change–initiated variations to local temperature and precipitation patterns are still forthcoming. The body of work currently available from national and international research contains a full spectrum of possible outcomes based on numerous greenhouse gas emission scenarios run through an assortment of General Circulation Models (“GCM”). In the absence of research consensus, the Water Authority has adopted a qualitative evaluation approach that uses a manageable number of six (6) climate change scenarios to develop a range of potential demands.

Findings from the evaluation of the climate change scenarios indicate no dramatic shifts in near-term precipitation patterns for the San Diego area. Additionally for reference year 2035, the end of the 2010 UWMP planning horizon, mixed results were observed in the variation of precipitation projections among the climate models. Three of the climate projections resulted in annual precipitation estimates lower than the historic average. Similarly, temperature modeling revealed no dramatic shifts in seasonal patterns, and mixed results prevailed between projected temperatures and historic averages for reference year 2035. The disagreement in short-term climate projections is not entirely unexpected given the protracted lead-time forecasted for significant build-up of greenhouse gases. Over longer timescales, the ensemble of climate scenarios show higher temperatures estimated for the region – with five of the six climate scenarios indicating warmer annual average temperature conditions for 2050 and 2099.

A range of climate change influenced water demands was then calculated by substituting the six climate scenarios into the Water Authority’s long-range econometric demand forecast model (“CWA-MAIN”). For reference year 2035, all but one of the climate scenarios resulted in total water use slightly higher than baseline normal weather demands. The average climate change impact on 2035 demand, across all three GCMs, ranged from a 0.63 to 1.8 percent increase. The relatively small increase in 2035 demand under all climate scenarios suggests that significant water demand impacts associated with the forecasted trend toward warmer and drier climate conditions may occur on a time-step beyond the 2010 Plan planning horizon.
While climate change impacts will just start to be experienced within the 25-year planning horizon of the 2010 UWMP, its potential influences should be considered in establishing strategies that provide water supply benefits within this planning horizon, while increasing the ability to manage potential climate change impacts in the future. Changes to the region’s climate will be gradual and prolonged, providing water supply agencies the ability to adapt planning strategies to manage for the supply uncertainties. The future climate change related affects on supply and demand and adaptation measures employed by the Water Authority and its member agencies will be captured in each five-year update of their respective UWMP.

Water Quality. As the largest single component of the Water Authority’s supply portfolio, the water quality of the Colorado River has a substantial impact on the region’s overall water quality. Over the last five years, the Water Authority has received on average roughly 70 percent of its imported supply from the Colorado River and the remaining 30 percent from the SWP. Colorado River supplies are relatively high in salts, in the form of total dissolved solids, which pose potential additional treatment costs. A variety of sources bring such dissolved solids into the river. However, the majority of salts run naturally off of soils and rocks. While SWP supplies have lower salt levels, water from the Bay-Delta can be high in organic compounds that react with chlorine to form various disinfection by-products, including trihalomethanes. Higher water treatment costs are incurred to eliminate these potentially harmful compounds. In order to control the total organic carbon and bromide concentrations in MWD’s water supply, SWP water is blended with Colorado River water, which is lower in disinfection by-products and higher in salinity than SWP water. The blending results in a reduction in disinfection by products and reduction in salinity.

Federal and state regulatory agencies continually monitor and establish new water quality standards. The Federal Safe Drinking Water Act (“SDWA”) establishes drinking water quality standards, monitoring, public notification and enforcement requirements for public water systems. The U.S. Environmental Protection Agency (“USEPA”), as the lead regulatory authority, promulgates national drinking water regulations and develops the mechanism for states to assume primary enforcement responsibilities. The California Department of Public Health (“CDPH”) has lead authority over California water agencies.

Two water quality issues of concern in Colorado River water are perchlorate and chromium-6. Perchlorate, used in solid rocket propellants, munitions and fireworks, has contaminated some drinking water wells and surface water sources throughout California. Perchlorate also has been detected in MWD’s Colorado River water supplies. A chemical manufacturing facility near Lake Mead in Nevada is the primary source of the contamination. Remediation efforts began in 1998 and have been successful at meeting the cleanup objectives, significantly reducing the levels of perchlorate entering into the Colorado River. The maximum contaminant level (“MCL”) for perchlorate is six parts per billion (“ppb”) and discharges have been reduced to less than four ppb. Through water blending, perchlorate is non-detectable in the water supply.

Chromium-6 is found in trace amounts in MWD’s source water. On July 27, 2011, the Office of Environmental Health Hazard Assessment (OEHHHA) established a public health goal (PHG) for chromium-6 (hexavalent chromium) of 0.02 micrograms per liter (µg/L). The PHG will contribute to CDPH's development of a primary drinking water standard (MCL) that is specific for chromium-6. Presently, the Water Authority is participating through MWD in its effort to monitor and influence the clean-up of chromium-6 in groundwater at Pacific Gas & Electric Company’s natural gas compressor station in Topock, Arizona, near Needles, California. The historical waste practices at the Topock facility have resulted in a chromium-6 plume in the groundwater that has the potential to enter the Colorado River. The current corrective action process will result in a remediation alternative for cleanup.

Local Supply Development Coordination. In 2007, the Water Authority Board approved the first San Diego Region Integrated Regional Water Management Plan (the “IRWM Plan”). The IRWM Plan was developed by the Regional Water Management Group (“RWMG”), which comprises staff from the Water Authority, the City of San Diego and the County of San Diego. The IRWM Plan represents an unprecedented effort in the area of coordinated water management across a wide spectrum of agencies and non-governmental organizations in the San Diego area. It reflects a comprehensive approach to water resource planning, and integrates ongoing local planning efforts to maximize water management benefits. The IRWM Plan identifies programs and projects that best achieve the region’s goals to optimize water supply reliability and protect and enhance water quality while providing stewardship of natural resources.
In 2008, the San Diego IRWM region was awarded a $25 million grant by the DWR to support implementation of 19 projects designed to improve the reliability of the San Diego region’s water supply, protect and enhance water quality, and manage natural resources. All of the projects in the grant are helping to accomplish the water supply goals established in the Water Authority’s UWMP. Funding for the projects resulted from voter passage of Proposition 50 in 2002. The Water Authority began distributing grant funds to the project proponents in 2009.

Further IRWM bond funding from the state became available when the voters approved Proposition 84 in 2006. Proposition 84 allocates $83 million ($91 million minus $8 million taken off the top by DWR to cover program administration costs) to the San Diego Funding Area, which includes the IRWM planning regions in San Diego, southern Riverside and southern Orange counties. Under an agreement between the three planning regions, approximately $65 million in Proposition 84 funds will be distributed in the San Diego Region. The first portion of this money came to the San Diego Region in 2011 in the form of a $1 million planning grant to support an update of the IRWM Plan. The IRWM Plan update is ongoing and scheduled for completion in November 2013.

Also in 2011, the San Diego Region received a $7.9 million implementation grant to support development of 11 projects designed to improve water supply reliability and water quality, manage stormwater runoff and protect watersheds in the region. Funding for the projects resulted from voter passage of Proposition 50, and the grant projects are helping to accomplish goals established in the Water Authority’s UWMP. A funding agreement for this money between DWR and the Water Authority, acting on behalf of the RWMG, is expected to be finalized by December 31, 2012.

MEMBER AGENCY WATER USAGE

Water Use by Member Agencies

The term “water use” describes the quantity of water a member agency obtains from all sources to meet its consumers’ needs. These sources presently include impounding surface water reservoirs, groundwater, desalinated groundwater, recycled water and imported supplies via the Water Authority’s transportation system.

It is the policy and responsibility of the Water Authority to provide all supplemental water required by its member agencies to meet their consumers’ needs. The level of dependence varies widely across the Water Authority’s 24 member agencies. Some member agencies are totally dependent on imported water supplies. Other member agencies’ dependence on Water Authority water supplies varies from about 90 percent to a complete roll-off of the imported system during above normal rainfall cycles.

Annual water use of the member agencies for fiscal years ended June 30, 2008 to June 30, 2012 and a class of service breakdown of imported agricultural and M&I water use for fiscal year ended June 30, 2012 are listed in the following tables:
## WATER USE OF MEMBER AGENCIES – FISCAL YEARS ENDED JUNE 30, 2008 TO JUNE 30, 2012

(All Figures in Acre-Feet)

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<thead>
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<td>Water Authority Supplies²</td>
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<td>Water Authority Supplies²</td>
<td>Total</td>
<td>Local Production¹</td>
<td>Water Authority Supplies²</td>
<td>Total</td>
<td>Local Production¹</td>
<td>Water Authority Supplies²</td>
<td>Total</td>
<td>Local Production¹</td>
<td>Water Authority Supplies²</td>
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<td>675</td>
<td>3,375</td>
<td>4,050</td>
<td>659</td>
<td>3,521</td>
<td>4,180</td>
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<td>4,635</td>
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<td>4,070</td>
<td>31,175</td>
<td>35,245</td>
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<td>7,930</td>
<td>4,989</td>
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<td>7,145</td>
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<td>11,889</td>
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<td>9,475</td>
<td>5,117</td>
<td>5,778</td>
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<td>16,098</td>
<td>2,943</td>
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<td>19,051</td>
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<td>3,376</td>
<td>779</td>
<td>2,519</td>
<td>3,298</td>
<td>1,004</td>
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<td>1,748</td>
<td>1,198</td>
<td>2,946</td>
</tr>
<tr>
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<td>608,903</td>
<td>691,931</td>
<td>88,111</td>
<td>555,789</td>
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<td>71,486</td>
<td>494,957</td>
<td>566,443</td>
<td>110,101</td>
<td>416,844</td>
<td>526,945</td>
<td>102,886</td>
<td>439,552</td>
<td>542,438</td>
</tr>
</tbody>
</table>

¹ Includes surface, recycled and groundwater supplies; does not reflect conserved water.
² Water use in a given year may differ from Water Authority sales due to storage.
³ Includes Water Authority deliveries via South Coast Water District System.
⁴ Excludes City of San Diego local surface water use outside of Water Authority service area.
⁵ Excludes land outside of Water Authority service area.
⁶ Excludes local supplies developed beyond Yuima’s master meters.
⁷ Numbers may not total due to rounding.
Due to the aggregated level of data provided by its member agencies, the Water Authority tracks local and imported water use under two class of service categories: the agricultural class and municipal and industrial ("M&I") class. Water tracked as agricultural is purchased either through the MWD sponsored Interim Agricultural Water Program ("IAWP") or the Water Authority’s Special Agricultural Water Rate ("SAWR"). All remaining non-agricultural consumptive use reported by Water Authority member agencies is deemed M&I water use.

Water use in the San Diego region is closely linked to the local economy, population, and weather. In fiscal year 2007, annual water demands in the Water Authority’s service area reached an all-time high of 741,893 acre-feet. However due to a sustained national recession, MWD supply allocations, and member agency implementation of mandatory water use restrictions, water demand in the Water Authority’s service area declined over the next four successive years - plunging 29 percent from 2007 levels to 526,945 acre-feet in fiscal year 2011. The magnitude of this demand drop-off was unprecedented in the Water Authority’s history and required heightened fiscal pragmatism and additional cost management strategies to deal with the reduction in consumption. In 2012, a slight increase in water use was experienced with total demand reaching 542,438 acre-feet. The 3 percent growth in 2012 water use signaled an end to the consecutive year-over-year drop in consumption and may indicate the start of an upward trend in demands. This trend continued through the first five months of fiscal year 2013, in which cumulative demands continue to exceed 2012 levels.

WATER AUTHORITY MEMBER AGENCY

WATER USE
FISCAL YEAR ENDED JUNE 30, 2012

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Agricultural Use Acre-Feet</th>
<th>M&amp;I Use Acre-Feet</th>
</tr>
</thead>
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<tr>
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Note: Totals may not add due to rounding

1 Includes only amounts certified through the IAWP and SAWR agricultural water use programs.
Per Capita Water Use

The table below sets forth the estimated daily per capita M&I water use within the Water Authority’s service area for the fiscal years ended June 30, 1989 to June 30, 2012.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Local Production (af)</th>
<th>Water Authority Supplied (af)</th>
<th>Total (af)</th>
<th>Total Agricultural Water Use (af)</th>
<th>M&amp;I Water Use (af)</th>
<th>Population</th>
<th>Daily Per Capita M&amp;I Use (gallons)</th>
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</thead>
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</tbody>
</table>

1 Water use data provided by member agencies.
2 Totals may not foot due to rounding.
3 Total Agricultural Water Program Use equals IAWP and SAWR use plus estimated local water utilized for agricultural purposes. See Agricultural Water Use below.

The 2009 State Water Legislation seeks to achieve a 20 percent statewide reduction in urban per capita water use in California (relative to 2005 baseline use) by December 31, 2020. The law requires each urban retail water supplier to develop urban water use targets to help meet the 20 percent goal by 2020, and an interim water reduction target by 2015. Although compliance with the legislative mandate rests with retail water agencies, the law requires that the Water Authority, as the wholesale supplier, support its retail member agencies’ efforts to comply with the 2009 State Water Legislation through a combination of regionally and locally administered active and passive water conservation measures, programs and policies, as well as the use of recycled water.
The table below shows estimated aggregated member agency per-capita potable targets under the 2009 State Water Legislation. These estimates were calculated using retail level per-capita targets provided by Water Authority member agencies and SANDAG population projections for each member agency.

### 2009 STATE WATER LEGISLATION

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Regional Potable Gallons Per-Capita Per Day Target</td>
<td>174</td>
<td>167</td>
</tr>
</tbody>
</table>

### Agricultural Water Use

San Diego County has a well-established agricultural sector with an estimated 301,000 acres of farmland and a reported annual value for all agricultural commodities totaling over $1.68 billion in 2011. Nursery crops represent approximately $1.09 billion of output, with fruits and nuts and vegetable production contributing an additional combined $496 million. Estimated total agricultural water consumption by Water Authority member agencies during the fiscal year ended June 30, 2012 was 59,609 acre-feet, about nine percent of total water use for the year.

Historically, much of the County’s agricultural acreage was enrolled in MWD’s IAWP. The IAWP is a voluntary program that offers agricultural customers a discounted water rate in exchange for being the first to be cutback up to 30 percent during MWD supply shortages. On January 1, 2008, MWD implemented, for the first time in the history of the program, a full 30 percent cut to agricultural customers in the IAWP. These mandatory reductions continued until April 2011, when MWD’s Board took action to terminate the cutbacks as a result of the current supply outlook and improved storage conditions.

Additionally, MWD also initiated a phase-out of the IAWP, with the program termination date set for December 31, 2012. As part of the phase-out process, the MWD agricultural rate discount will be reduced annually along with a commensurate reduction in cutback obligation. Included in the IAWP phase-out guidelines is an opt-out provision that allows customers to exit the program on January 1 of each year.

In consideration of the IAWP phase-out, the Water Authority Board adopted a transitional Special Agricultural Water Rate (“Transitional SAWR”) for agricultural customers exiting the IAWP. In exchange for receiving the Transitional SAWR rate, composed of a supply rate differential and storage charge exemption, agricultural customers forego the additional supply reliability associated with the Water Authority’s QSA supplies and receive a higher cutback set at the MWD municipal and industrial reduction level. With the supply rate differential portion of the Transitional SAWR scheduled to sunset on December 31, 2012, concerns were raised by the agricultural community and Water Authority agricultural member agencies regarding the viability of San Diego’s agricultural under the proposed higher cost of water. The Water Authority subsequently initiated a dialogue with its agricultural member agencies, the Farm Bureau of San Diego County and California Avocado Commission to look more broadly at agricultural benefits to the community. Based on these discussions and Water Authority staff analysis that showed continuing the current Transitional SAWR rate structure would impact the Water Authority’s total M&I untreated rate by less than two percent, the Water Authority Board approved an extension of the current Transitional SAWR through December 31, 2014.

### Water Reclamation, Reuse and Groundwater Recovery

Since the late 1980s, the Water Authority has assisted its member agencies to plan, develop, and finance water recycling and groundwater recovery projects throughout the Water Authority’s service area. The Water Authority has also provided assistance to its member agencies to enhance and expand existing facilities. This support has been made through technical assistance and financial aid for project planning and study phases traditionally funded by the individual local agencies. The Water Authority currently provides a financial incentive of up to $200 per acre-foot for the beneficial reuse of recycled water and groundwater recovery to existing contractual projects. To date, the Water Authority has expended cumulatively over $31 million towards this effort. MWD also offers a variable recycling credit, based on project financial need, of up to $250 per acre-foot. In its
2010 UWMP, the Water Authority, through its member agencies, identified almost 50,000 acre-feet per year of recycled water and over 28,000 acre-feet per year of groundwater supplies to be developed by 2035.

**WATER AUTHORITY WATER FACILITIES**

To meet the demands of its member agencies, the Water Authority requires water conveyance facilities, water storage facilities and water treatment facilities. Certain of these facilities are owned and operated by the Water Authority and others are owned and operated by MWD or by member agencies.

**Water Conveyance Facilities**

Water from the Colorado River is transported from Lake Havasu through MWD’s Colorado River Aqueduct. Supplies for the Water Authority are diverted from the Colorado River Aqueduct near the west portal of the San Jacinto Tunnel into the Casa Loma Siphon No. 2 and Canal. A few miles to the southwest, MWD’s San Diego Canal takes water from the Casa Loma Canal and delivers it into Diamond Valley Lake and further south into Lake Skinner. Both storage reservoirs of MWD are located in Riverside County and both are able to supply water to San Diego County.

SWP water is delivered to MWD at Lake Perris, the terminus of the 444-mile California Aqueduct. From there, it flows through the Lakeview Pipeline of MWD to the San Diego Canal where it is blended with Colorado River water.

While Diamond Valley Lake, with a maximum capacity of 800,000 acre-feet, is much larger, Lake Skinner is the primary storage facility for the Second San Diego Aqueduct, with a maximum capacity of 44,264 acre-feet. The maximum water elevation for storage is 1,479 feet above sea level. Water from Lake Skinner flows directly into Pipelines 3 and 5 while Pipelines 1, 2 and 4 receive treated water from the Skinner Filtration Plant.
The Water Authority takes delivery of imported water from MWD in the five pipelines within the two San Diego Aqueducts, approximately six miles south of the Riverside-San Diego County line. The following table provides information relating to the principal pipelines owned and operated by the Water Authority:

### PRINCIPAL WATER CONVEYANCE FACILITIES IN SERVICE

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Length (miles)</th>
<th>Diameter (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First San Diego Aqueduct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipeline 1 and Pipeline 2</td>
<td>68.1</td>
<td>72-48</td>
</tr>
<tr>
<td>La Mesa-Sweetwater</td>
<td>16.5</td>
<td>42-18</td>
</tr>
<tr>
<td>Moreno-Lakeside Pipeline</td>
<td>4.8</td>
<td>60-54</td>
</tr>
<tr>
<td>Second San Diego Aqueduct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipeline 3</td>
<td>59.2</td>
<td>75-66</td>
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<tr>
<td>Pipeline 4</td>
<td>44.9</td>
<td>96-69</td>
</tr>
<tr>
<td>Pipeline 4B</td>
<td>9.9</td>
<td>108-96</td>
</tr>
<tr>
<td>Pipeline 4E</td>
<td>19.6</td>
<td>108-72</td>
</tr>
<tr>
<td>Pipeline 5</td>
<td>11.2</td>
<td>96</td>
</tr>
<tr>
<td>Pipeline 5E</td>
<td>21.8</td>
<td>108</td>
</tr>
<tr>
<td>Crossover Pipeline:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Marcos at Twin Oaks to Escondido at Hubbard Hill</td>
<td>7.6</td>
<td>66</td>
</tr>
<tr>
<td>Ramona Pipeline</td>
<td>7.9</td>
<td>57-36</td>
</tr>
<tr>
<td>Tri-Agencies Branch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Marcos to Oceanside</td>
<td>4.4</td>
<td>42-21</td>
</tr>
<tr>
<td>North County Distribution Pipeline</td>
<td>3.5</td>
<td>72</td>
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<tr>
<td>Valley Center Pipeline</td>
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<td>66</td>
</tr>
<tr>
<td>Olivenhain Pipeline</td>
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<td>78</td>
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<tr>
<td>Olivenhain Hodges Interconnect Pipeline</td>
<td>1.2</td>
<td>121</td>
</tr>
<tr>
<td>San Vicente Pipeline and Aqueduct Interconnect</td>
<td>12.7</td>
<td>102</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Maps in the front portion of this Official Statement provide the location of certain facilities referenced in the above table.

The two pipelines of the First San Diego Aqueduct share common tunnels and inverted siphons and are operated as a single unit. The La Mesa-Sweetwater Extension of the First San Diego Aqueduct extends from the First San Diego Aqueduct at Slaughterhouse Canyon near San Vicente Reservoir to Sweetwater Reservoir. The Moreno-Lakeside Pipeline also delivers water from the First and Second Aqueduct to the Helix Water District’s R.M. Levy Water Treatment Plant. San Vicente Reservoir, which is owned and operated by the City of San Diego, is the terminus of the First San Diego Aqueduct.

The three pipelines of the Second San Diego Aqueduct (Pipelines 3, 4 and 5) share a common right of way for most of their length. Pipeline 3 terminates at the Lower Otay Reservoir, Pipeline 4 terminates at the City of San Diego’s Alvarado Water Treatment Plant and Pipeline 5 terminates at Miramar Hill northwest of Lake Miramar in the City of San Diego. Pipeline 4B extends from north of the City of San Diego’s Miramar Water Treatment Plant to the San Diego River. Pipeline 4E extends from the San Diego River to the Lower Otay Reservoir. The Tri-Agencies Pipeline delivers treated water to service areas of Carlsbad Municipal Water District, Vista Irrigation District, and the City of Oceanside. The North County Distribution Pipeline extends west from the Second San Diego Aqueduct to serve areas of the City of Oceanside, Vista Irrigation District, Rainbow Municipal Water District, and Vallecitos Water District. Pipeline 5E extends south from the Water Authority’s 100 MGD Twin Oaks Valley Water Treatment Plant in San Marcos to Rancho Penasquitos. The Ramona Pipeline extends east from the Second San Diego Aqueduct serving the Olivenhain Municipal Water District, the City of San Diego, and the Ramona Municipal Water District. The Valley Center Pipeline conveys treated water between the northern reaches
of the First and Second San Diego Aqueducts. The Olivenhain Pipeline conveys untreated water between the Second San Diego Aqueduct and the Olivenhain Reservoir. The San Vicente Pipeline and Aqueduct Interconnect connects the San Vicente Reservoir to the Second Aqueduct at the Rancho Penasquitos Hydroelectric Facility.

The Water Authority controls the operations of its water delivery system from a central operations center. The operations center uses a Supervisory Control and Data Acquisition (“SCADA”) system to monitor and control the flows in each of the pipelines and to each member agency. The SCADA system, separate from the business system, with redundant equipment, checks each remote facility every 30 seconds to monitor status and send commands for changes in operations. The communications occur through fiber optics, a leased phone line system, and microwave radio to each of the 97 locations controlling over 103 facilities.

The Water Authority established an integrated asset management program in 2009, which seeks to ensure the proper maintenance, repair and replacement of Water Authority assets at the lowest possible cost to ratepayers. The asset management program consists of an asset registry, condition assessment, risk assessment, and repair/replacement schedules. Ultimately the condition and risk assessment data is used to generate recommendations for construction, repair, or replacement of assets over their entire life cycle.

The quagga mussel, an aquatic invasive species, was first found in the lower Colorado River system in January 2007. The rapid propagation of this species, if unchecked, has the potential to disrupt operations at the Water Authority’s delivery system and facilities. Since that time, the mussel has established its presence in the San Diego Region. The Water Authority, its member agencies, and other regional partners formed the San Diego Regional Quagga Mussel Working Group in 2007 to aid in information sharing. In June 2008, this group released the draft Regional Quagga Mussel Response and Control Plan as a guide to water agencies preparing an agency specific response and control plan. The Water Authority has also implemented its own system specific monitoring and control plan in 2011 to address issues related to the Water Authority’s delivery system and facilities. The Water Authority is working closely with the DFW as well as other industry leaders to ensure continued process improvement.

**Water Storage**

**Reservoirs.** The Water Authority has storage capacity both leased and owned within the region. Total storage capacity is currently approximately 84,000 acre-feet between leased capacity in the City of San Diego reservoirs and owned capacity in Olivenhain reservoir. When the Water Authority’s Emergency Storage Project (the “ESP”) is completed in 2013, the Water Authority’s in-region storage capacity will increase to more than 196,000 acre-feet (it will take approximately five years to fill the added capacity). When complete, the ESP will allow the Water Authority to convey water throughout the County during an emergency or drought condition. The ESP is being constructed in a phased manner. Components of the Water Authority’s surface storage capacity, including those in development, are:

The Olivenhain Reservoir was completed in 2003 as part of the first phase of the ESP. The Olivenhain Reservoir has a storage capacity of 24,300 acre-feet of water. In 2008, the Water Authority constructed an interconnect pipeline to connect Lake Hodges to the Olivenhain Reservoir, allowing for additional stored water transfer within the region. In 2012 the Water Authority completed construction of the Lake Hodges Pump Station and 40 megawatt hydroelectric facility. The Water Authority also owns and operates a 4.5 megawatt hydroelectric generating facility along the Second Aqueduct in the Rancho Peñasquitos area.

Construction of a Water Authority project to raise the City of San Diego’s San Vicente Dam began in 2009 and is expected to be completed in 2013. Agreements with the City of San Diego regarding the ESP have extended the Water Authority’s ability to store up to 60,000 acre-feet in City of San Diego-owned reservoirs. The storage capacity lease rate in City of San Diego reservoirs is $17.53 per acre-foot for the maximum amount of water in storage each year. The City receives a credit of $13.76 per acre-foot for Water Authority water pumped to the City from the Water Authority’s storage account in Lower Otay Reservoir. The Water Authority’s stored water is subject to evaporation, seepage and spill losses.

In 1929, the California Legislature enacted legislation providing for supervision over non-federal dams in the State. The statutes place the supervision of the safety of non-federal dams and reservoirs under the jurisdiction of the DWR’s Division of Safety of Dams (“DSOD”). Dams under jurisdiction are artificial barriers, together with
appurtenant work, including outlet towers, which are twenty-five feet or more in height or have an impounding capacity of fifty acre-feet or more. Any artificial barrier not in excess of six feet in height, regardless of storage, or that has a capacity not in excess of fifteen acre-feet, regardless of height, is not considered jurisdictional. The DSOD reviews plans and specifications for the construction of new dams or for the enlargement, alteration, repair or removal of existing dams, and must grant written approval before the owner can proceed with construction. The DSOD routinely inspects operating dams to assure that they are adequately maintained. The DSOD also conducts investigations of selected dams and directs the owners to additional investigations and detailed safety evaluations when necessary. DSOD may impose operating restrictions on dams and reservoirs that reduce storage capacity or otherwise adversely affect the operation of water facilities. The Water Authority is in compliance with DSOD design and construction requirements for the San Vicente Dam raise project.

Groundwater Storage. As part of the QSA, the Water Authority became the recipient of groundwater conjunctive use funds appropriated through Senate Bill 1765 (1998), which originally were designated to MWD. Approximately $35 million was made available to the Water Authority for use in its groundwater program. A demand and supply analysis utilizing data from the Water Authority’s 2005 Urban Water Management Plan identified a maximum potential need for approximately up to 95,000 acre-feet of additional carryover storage beyond the 100,000 acre-feet of carryover storage in the Water Authority’s Capital Improvement Program. This evaluation examined a three-year dry cycle scenario during which demands are high and imported supplies are constrained by preferential rights. Based on that scenario, the Water Authority distributed a Request for Proposal in November 2005 to partner with agencies overlying a groundwater basin for a conjunctive use project. The project would allow water to be delivered and stored during above normal hydrology and extracted from the basin and delivered to the Water Authority either by wheeling through various facilities, exchanges, or a reduction in demands on the Water Authority.

In June 2008, the Water Authority executed an agreement with Vidler Water Company, Inc. (“Vidler”) for 30,000 acre-feet of storage and capacity rights in the Semitropic Water Bank in the southern part of the San Joaquin Valley in Kern County. The cost to purchase Vidler’s Semitropic Program was approximately $11.75 million. In August 2008, the Water Authority acquired 10,000 units (which equates to 40,000 acre-feet of storage together with rights to certain capacities) in the Semitropic-Rosamond Water Bank Authority (“Semitropic-Rosamond”). The cost to acquire storage and recovery rights in Semitropic-Rosamond was $15 million. In 2008, the Water Authority purchased approximately 23,077 acre-feet of water from Butte Water District and Sutter Extension Water District at $200/acre-feet -- $4.6 million – anticipating storing the water in the Groundwater Program as “initial fill.” The Water Authority has been reimbursed $30.48 million for these acquisitions.

Local Storage Agreements. With the drawdown of San Vicente Reservoir, required to complete construction of the San Vicente Dam Raise Project, and recent drought conditions, the Water Authority has been working with its member agencies to optimize local storage opportunities. Working collaboratively, the Water Authority and its member agencies have optimized local facilities to move supplies into local storage. Current total carryover storage held by the Water Authority in the region is approximately 16,000 acre-feet. Carryover storage is water stored over and above emergency storage targets. The Water Authority’s carryover storage target is 60,000 acre-feet until the San Vicente Dam Raise project is complete at which time 100,000 acre-feet of capacity will be available for carryover storage.

Water Treatment Facilities

The Water Authority purchases treated water from MWD and purchases treatment from member agencies with treatment facilities. Based on a two-year average of deliveries over FY 2011 and FY 2012, approximately 42 percent of the water sold by the Water Authority is treated water. MWD delivers treated water to the Water Authority’s service area from its Skinner Filtration Plant, which is located at Lake Skinner and has a treatment capacity of 630 MGD. Treated water is delivered to the Water Authority through three pipelines, only one of which stretches the length of the county. From Lake Skinner in Riverside County, untreated water is currently conveyed south to the Water Authority in two pipelines. At a point near the City of San Marcos, the Crossover Pipeline extends to the east and connects to the two pipelines of the First San Diego Aqueduct that carry untreated water south to San Vicente Reservoir. From this point near San Marcos, another untreated water pipeline delivers water south for treatment at a number of water treatment plants owned and operated by several of the Water Authority’s member agencies.
As early as 2001, the Skinner Filtration Plant began to operate above its rated capacity to meet the treated water demands of both Riverside and San Diego Counties during long, hot, and dry periods. During these same periods, the Water Authority’s member agency water treatment plants operated near capacity to meet San Diego County demands as well. As a result, the Water Authority’s Regional Water Facilities Master Plan (“Master Plan”) recommended creation of additional regional treatment capacity. Upon approval of the Master Plan in June 2004, the Water Authority began design and construction of the Twin Oaks Valley Water Treatment Plant (“TOVWTP”).

The Water Authority utilized the Design-Build-Operate (“DBO”) procurement method for the TOVWTP. This method of procurement includes retaining a single entity to design, construct, and operate the TOVWTP. The contract provides that the selected DBO entity operate the plant for an initial period of 15 years, with an option to extend that term by an additional five years. The Water Authority awarded the DBO contract in September 2005 to CH2M HILL OMI and the TOVWTP came online in April 2008. The TOVWTP added 100 MGD of locally treated high quality drinking water capacity to San Diego County.

In addition to the TOVWTP, the Water Authority purchased 36 MGD of treatment capacity in 2002 at the Helix Water District’s R.M. Levy Water Treatment Plant. Water produced at the Levy plant supplements treated water services in eastern San Diego County.

Seismic and Wildfire Considerations

Water conveyance facilities are designed to withstand earthquakes with minimal damage. Earthquake loads have been taken into consideration in the design of project structures such as pumping plants and hydroelectric plants. All known faults are crossed by pipelines at very shallow depths to facilitate repair in case of damage from movement along a fault. To date, no Water Authority facilities have suffered any material earthquake damage. The Water Authority’s ESP was designed to allow continued water service to its member agencies at a 75 percent level of service or better in the event of a complete interruption of water deliveries from MWD, such as might result from a severe earthquake along a fault traversing pipelines connecting with MWD, for a period of up to two months while pipelines and facilities are being repaired or six months in the event that a limited amount of water was available from MWD. The Water Authority constructed the Twin Oaks Water Treatment Plant, a 100 MGD submerged membrane treatment plant, and placed the plant into operation in 2008. The treatment plant provides additional local water treatment capability to the region during an ESP event.

Water conveyance facilities for the most part consist of pipelines and connections, flow control facilities, and pumping stations. The three hundred miles of water conveyance pipeline that are underground are not vulnerable to damage by wildfires. The above-ground facilities are designed to be tolerant to damage by wildfires as the facilities are constructed of poured concrete or slump block, and the rights of way near facilities are maintained clear of plant growth or landscaped with drought tolerant plants making them less vulnerable to damage by wildfires. The Water Authority’s Emergency Operations Center (“EOC”) in Escondido, California, is activated during wildfires or other emergency events. An alternate EOC can be activated at the San Diego Headquarters office or the Twin Oaks Valley Water Treatment Plant should the primary EOC be compromised. While activated, the wildfires are monitored and operations and maintenance crews are dispatched to ensure that all above-ground facilities are safe and remain operational. The Water Authority is also represented at the County’s Operational Area EOC to best manage water interests during a major event. The last major wildfire in San Diego occurred in October 2007 and caused only minor damage to the Water Authority’s assets, facilities and projects.

The Water Authority has long maintained a focus on emergency preparedness and response. In 2007, the Water Authority updated its emergency management program by publishing an Integrated Contingency Plan, which complies with the National Incident Management System. The plan undergoes regular reviews and revisions to ensure accuracy and to maintain compliance with state and federal regulations. In order to prepare for a major emergency, the Water Authority regularly activates its EOC for planned event control, coordinates with member agencies on emergency preparedness issues, and participates in County of San Diego Operational Area exercises.

Safety and Security

The Water Authority conducted two separate vulnerability analyses for its water delivery system in 2001 and 2003. The latter was required as part of the 2002 Bioterrorism Act. Since that time, the Water Authority has implemented security improvements throughout the system including improved security procedures, redundant
communication systems, hardening facilities against physical attack, improving facility lighting, real time water quality monitoring, and adding video surveillance capabilities. The Water Authority considers additional improvements as technology advances, new threats are highlighted, and as each new facility is constructed. Physical inspection by field staff is also performed regularly to aid in protection of Water Authority facilities and rights of way. In addition, the Water Authority conducts periodic analyses of potential risks or vulnerabilities within the SCADA and business system computer networks.

Although the Water Authority has undertaken many emergency preparedness and security improvements, a terrorist attack or significant natural disaster could materially impair system operations, water deliveries and revenues.

Insurance

The Water Authority is a participant in the Special District Risk Management Authority pooled insurance program and obtains coverage for general liability, errors and omissions, employment practices liability, auto, property, boiler and machinery, and crime and fidelity coverage through the program. The Water Authority also maintains workers’ compensation coverage. See APPENDIX A - WATER AUTHORITY FINANCIAL STATEMENTS.

Energy

Over the last several years, in addition to identifying climate change adaptation strategies, the Water Authority has implemented mitigation strategies to reduce greenhouse gas emissions from its operations. Fourteen vehicles have been removed from the Water Authority’s fleet, and an additional three vehicles have been replaced with hybrids. As vehicles are scheduled for replacement in the future, each will be evaluated for necessity and potential replacement with hybrid or other alternative fuel vehicles. Photovoltaic solar panels were installed at the Water Authority’s three major facilities, the Twin Oaks Valley Water Treatment Plant, the Kearny Mesa administrative headquarters and the Escondido Operations Center. The three solar projects combined are expected to produce approximately 2.8 million kilowatt-hours annually and prevent the release of more than 70 million pounds of greenhouse gas emissions over the 20-year term of the solar projects contract. In addition, based on current energy costs, the solar projects are projected to result in a savings of nearly $1.7 million over the life of the contract. The Water Authority’s 4.5 megawatt Rancho Penasquitos in-line hydroelectric facility began operation in 2006. The facility provides clean renewable energy to the local grid through a ten-year contract with the local investor-owned utility, while providing a revenue stream for Water Authority operations. In September 2011, the Water Authority placed the first of two 20 Mw turbines of the Lake Hodges Pump Storage Facility into operation. The second 20 Mw turbine was placed into operation in August of 2012 and is providing energy to the local grid in accordance with an existing 25 year power purchase agreement with San Diego Gas & Electric. The Water Authority continues to pursue energy efficiency options in all areas of its operations and to investigate additional potential for implementation of in-line hydroelectric and emerging energy generation technologies such as floatovoltaics and/or wind.

THE CAPITAL IMPROVEMENT PROGRAM

The Water Authority’s Capital Improvement Program (the “CIP”) is designed to meet the mission of the Water Authority to provide a safe and reliable supply of water to its member agencies serving the San Diego region. A map in the front portion of this Official Statement provides the location of major components of the CIP.

In August 1989, the Board approved “The Water Distribution Plan, A Capital Improvement Program Through the Year 2010.” The resolution the Board adopted stated in part that “in order to meet the existing and future needs of its member agencies and the over three million people whom they serve, it is necessary that existing pipeline capacities and filtration facilities be significantly improved.” The Water Distribution Plan contained ten projects designed to meet the objectives of:

- increasing the capacity of the aqueduct system
- increasing the yield from existing water filtration plants
• obtaining additional water supplies from MWD
• increasing the reliability and flexibility of the aqueduct system

In annual reports to the Board since June 1991, the Water Authority has made modifications to the original list of projects included in the Water Distribution Plan. New projects have also been added as needs have been identified for a service area of more than three million inhabitants. Through June 30, 2012, $2.79 billion has been spent to complete various capital projects since 1989. When a project has been completed and placed in service it is no longer included in the CIP budget. The present CIP budget is $3.6 billion for 49 projects that are in various stages of planning, design, and construction. Of such amount, approximately $1.57 billion has been expended with respect to projects that have not been completed and placed in service and are remaining in the CIP budget, leaving an unspent balance in the CIP budget of approximately $2.03 billion. The Water Authority expects to spend approximately $754.4 million over the next five years on capital improvement projects. Approximately a third of that amount, $279.9 million, is expected to be spent in the period for the fiscal years ending June 30, 2013 and June 30, 2014. Of this amount, approximately 85 percent of that will be spent on five construction projects.

### SAN DIEGO COUNTY WATER AUTHORITY CAPITAL IMPROVEMENT PROGRAM BUDGET
(dollars in millions)

<table>
<thead>
<tr>
<th>Project Category</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>Total</th>
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<tbody>
<tr>
<td>Asset Management</td>
<td>44.8</td>
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<td>60.6</td>
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<td>Other</td>
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<td>155.8</td>
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<td>210.0</td>
<td>157.7</td>
<td>106.6</td>
<td>754.4</td>
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</tbody>
</table>

The Water Authority plans to use a combination of funds to pay for the CIP, including proceeds derived from the sale of long-term fixed rate debt, variable rate debt and cash generated from Water Authority operations. Overall, the Water Authority plans to fund approximately 23 percent of its $3.6 billion CIP with cash and the balance from a combination of long-term fixed rate debt, short-term debt and variable rate debt. The financial projections included in this Official Statement reflect a long-term adherence to the overall funding ratio, rather than an attempt to maintain this ratio of funding in individual years. See PROJECTED OPERATING RESULTS.

### Projects in the Capital Improvement Program

The current CIP contains 49 projects. The projects are a mix of water transportation, storage, treatment, flow control facilities, and pipeline relining and replacement projects.

- The largest single aggregation of projects is the $1.5 billion ESP. The ESP is a mix of pipelines, dams, reservoirs and pump stations to enhance the supply of emergency water within the Water Authority service area. The majority of that work has been completed with only the San Vicente Dam Raise project remaining as a substantial project that is currently under construction.

- A substantial amount of future facilities work will be in the Water Authority’s Asset Management Program. The Water Authority’s Asset Management Program includes all activities required to derive the most value from an asset through its life cycle. The primary goal of the program is for the planning, design, construction, operation, maintenance, or surplus of assets to be completed at the optimal time to ensure water delivery system reliability at the lowest cost and with the least impact to member agencies. To
ensure this, Water Authority staff developed, and the Water Authority’s Board approved, the Asset Management Plan in January 2009 and the Asset Management Program Funding Policy in January 2010. One of the largest components of the Asset Management Program is the relining and replacement of aging pipelines. Expenditures in support of these activities are forecast to average $50 million per year over the next ten years.

- The balance of projects over the next 20 years beyond the ESP and relining/replacement of pipelines is forecast to be in the construction of additional pipelines and flow control facilities and the implementation of an asset management program. The roadmap for future capital infrastructure will be determined by the Facilities Master Plan Update scheduled to be completed in calendar year 2013.

- Fiscal year ended June 30, 2007 marked the peak of CIP expenditures at $290 million. Since that time, the majority of the Water Authority’s large projects have either been completed or are in final stages of construction. The San Vicente Dam Raise suite of projects ($446 million) is moving forward with design and construction of the various packages. The major component, Package 3, the actual raising of the San Vicente Dam, is forecasted to be completed in fiscal year ending June 30, 2013. The pipeline replacement and relining project ($786 million) will continue to expend funds as noted above. Two new pipelines (815 million) are currently planned to begin construction in about ten years. The Camp Pendleton planning phase desalination project has the potential to become a significant expenditure in the future.

- In November 2012, the Water Authority’s Board approved the implementation and financing of the Carlsbad Project. The desalinated water from the Carlsbad Project will be conveyed to the Water Authority’s Second Aqueduct in the City of San Marcos by a 54 inch diameter 10 mile long pipeline. This pipeline will be constructed by Poseidon pursuant to a Design-Build contract with the Water Authority. In order to receive and distribute the desalinated water the Water Authority must repurpose an existing pipeline, Pipeline 3, between the San Marcos and the Water Authority’s Twin Oaks Valley Water Treatment Plant. Pipeline 3 must be relined and rehabilitated to accommodate higher pressure than it was originally designed for as well as extend its useful life by approximately 75 years. Modifications will also be required at the Twin Oaks Water Treatment Plant. These modifications will be designed and constructed by the plant’s contract operator, CH2M Hill. Lastly, the Water Authority will make alterations to its San Marcos Vent to allow water to flow between Pipelines 4 and 3 to facilitate the construction of the desalination infrastructure while continuing to provide service to the Water Authority’s member agencies.

Cost Management Strategy

As construction costs began to spiral upward in the 2005 time frame, the Water Authority adopted a variety of strategies to deal with the problem. Internally, the Water Authority examined the basis of its cost estimating process and hired an economist to develop a model that would allow the Water Authority to forecast future project costs more accurately based on the unique mix of projects, materials, and skills required by the CIP. This action was combined with a look at the portfolio and timing of the CIP projects to ensure the best balance between reliability of water supply and costs.

At the same time, the Water Authority accelerated its efforts to pursue CIP best management practices. In 2004, the Water Authority joined MWD in a regional benchmarking effort involving a dozen water agencies in the Western United States. The purpose of the regional organization was to develop key capital improvement program performance measures and benchmarks. This has yielded a body of knowledge on best capital improvement program management practices that has been incorporated into the Water Authority’s CIP management practices and the formalization of the Water Authority’s CIP Best Management Practices document. Within the San Diego area the Water Authority is a member of a regional procurement committee consisting of large public sector organizations with substantial capital improvement programs. The purpose of this multi-agency group is to create a more competitive construction environment in San Diego County by creating uniform contracting and procurement practices, simplifying contracting processes, and coordinating the timing of agency facility construction contracts, making more bidders available for the same types of projects. This has led to several cost savings strategies that are focused on making the regional construction market more competitive.

The Water Authority works with the regional construction community to enhance relationships and improve bid outcomes. The Water Authority has involved itself in a variety of industry forums as speakers on topics
of interest, building relationships with contractors through personal contacts, open houses, and direct marketing techniques. Success has been achieved by using pre-advertisement open houses to hear potential concerns of contractors and craft bid packages, where possible, to create bidder friendly outcomes. Subsequent contractor bids on these projects have been very competitive.

In the current economy, the Water Authority has experienced contractor bids significantly below forecast costs. If this trend continues, the Water Authority’s savings are passed on to rate payers.

FINANCIAL OPERATIONS

The Water Authority’s principal source of revenue is net revenues from the sale of water by the Water Authority to its member agencies. The Water Authority’s rates and charges to member agencies for delivered water are set to equal the cost of water to the Water Authority plus additional components (e.g., debt service costs, QSA commitments). The Water Authority also levies Water Standby Availability Charges, capacity charges and IAC and receives hydroelectric power sales revenues, property tax revenues and Build America Bonds interest subsidy payments. The Water Authority’s ability to generate revenue may be limited by certain provisions of the State Constitution. See CONSTITUTIONAL LIMITATIONS.

Water Authority Water Rates and Charges

Water rates are established by the Board and are not subject to regulation by the California Public Utilities Commission or by any other local, state or federal agency. The Water Authority bills member agencies for water deliveries by the tenth business day of every month for water purchased during the prior month. Payments are due from the member agencies by the last business day of the month and are delinquent if not paid by the tenth business day of the following month.

Under the General Resolution, the Water Authority is required to fix rates which are reasonably fair and nondiscriminatory and which will be at least sufficient for the payment of all amounts payable from Net Water Revenues in each fiscal year and at least equal to 120 percent of Debt Service on all Bonds and Contracts. Effective January 1, 2003, the Water Authority’s Board implemented a rate structure designed to more effectively allocate the cost of service to its customers and to increase the proportion of revenues collected by fixed charges. During the projection period ending June 30, 2015, the Water Authority projects that fixed revenues will be approximately equal to 76 percent of fixed expenditures and will constitute approximately 64 percent of all revenues. [Update] The new rate categories include fixed Storage and Customer Service Charges, and variable Transportation, Melded M&I Treatment and Melded M&I Supply Rates. The Customer Service and Storage Charges are fixed charges that enable the Water Authority to increase its coverage of fixed expenditures by fixed revenues. Agricultural customers pay the Transportation Rate and the Customer Service Charge while M&I customers pay the Transportation Rate, the Customer Service Charge, and the Storage Charge, which funds the ESP. Agricultural water users have elected to receive a reduced level of service during an emergency, in return for excluding the cost of the ESP from their water rate, and pay MWD’s Interim Agricultural Water Program rate instead of the Water Authority’s melded supply rate. In 2008 MWD initiated a five-year phase-out of the IAWP, with a program termination date set for December 31, 2012. In consideration of the IAWP phase-out, the Water Authority Board adopted the Transitional SAWR for agricultural customers exiting the IAWP.

Rates effective January 1, 2013 through December 31, 2013 are as follows:

Customer Service Charge: The Customer Service Charge is set to recover costs that are necessary to support the functioning of the Water Authority, to develop policies and to implement programs that benefit the region as a whole. The Customer Service Charge is allocated among the member agencies on the basis of each agency’s three-year rolling average of all deliveries (excludes member agency wheeled water). The aggregate Customer Service Charge is currently $26,400,000.

Storage Charge: The Storage Charge is set to recover costs associated with the ESP. Allocation of the Storage Charge is based on all non-agricultural water deliveries and is allocated among the member agencies using a pro rata share of each agency’s three-year rolling average of non-agricultural deliveries (including all users, member agencies, and third-party wheeling throughput). The aggregate Storage Charge is currently $60,200,000.
Transportation Rate: The Transportation Rate is a uniform rate set to recover capital, operating and maintenance costs of the Water Authority’s aqueduct system including all facilities used to physically transport the water to member agency meters. The Transportation Rate is charged to each acre-foot of water as delivered by the Water Authority through Water Authority facilities. All users of Water Authority pipeline facilities, whether member agencies or third-party wheelers, pay the Transportation Rate. The Transportation Rate is currently $93 per acre-foot.

Melded Untreated M&I Supply Rate: The Water Authority has a melded supply rate which recovers the cost of water supply incurred by the Water Authority. These costs include the purchase of water from MWD, IID, the Coachella Canal Lining Project and the All-American Canal Lining Project, costs of MWD wheeling for non-MWD water supplies, and certain other costs associated with the QSA. The Melded Untreated M&I Supply Rate is currently $714 per acre-foot.

Melded M&I Treatment Rate: The Water Authority has a melded treatment rate, which recovers the costs of providing treated water. The melded treatment rate includes costs associated with MWD, Helix, and Olivenhain treatment facilities, as well as the costs associated with the Water Authority’s treatment plant’s operations. The Melded M&I Treatment Rate is currently $256 per acre-foot.

Transitional Special Agricultural Water Rate: The untreated Transitional SAWR rate effective January 1, 2013 is $593 per acre-foot. The treated Transitional SAWR rate effective January 1, 2013 is $849 per acre-foot. Effective January 1, 2015, agricultural water customers will be able to opt-in to the Water Authority’s permanent agricultural water program.

Other Water Authority Charges

Other Water Authority rates and charges include the IAC, the Water Standby Availability Charge, the System Capacity Charge and the Treatment Capacity Charge. These charges are defined as follows:

Infrastructure Access Charge: In June 1998, the IAC was adopted as an additional source of fixed revenue to improve coverage of the Water Authority’s projected fixed expenditures. The IAC is charged to each member agency based on the number and size of retail water meters within the member agency’s service area. On January 1, 1999, the Water Authority began charging its member agencies an IAC based upon the total household water meter equivalents within each member agency service area as of December 31st of the previous year. The intent of the IAC is to provide the Water Authority with the balance of “fixed” revenues required to generate a minimum 25 percent ratio of fixed revenues to fixed expenditures after taking into account the Water Authority’s existing fixed revenues produced by the Water Standby Availability Charge and property taxes and excluding revenues from the fixed Customer Service Charge and Storage Charge from the calculation. The Infrastructure Access Charge effective January 1, 2013 is $2.65 per meter equivalent per month.

Water Standby Availability Charge: The Water Authority obtained legislative authorization in 1988 to levy and collect annual Water Standby Availability Charges of up to $10 per acre (and on each parcel less than an acre). The Water Authority implemented these $10 Water Standby Availability Charges in the fiscal year beginning July 1, 1989. It is the policy of the Board that revenues from this source will be restricted to payment of construction expenditures under the CIP and to debt service. The Water Standby Availability Charge is deemed an assessment under Article XIIID of the California Constitution. See CONSTITUTIONAL LIMITATIONS - Article XIIIC and XIIID. Since November 6, 1996, the Water Authority has levied the Water Standby Availability Charge at the maximum permitted level.

System Capacity Charge: In May 1990, the Water Authority’s Board of Directors adopted a System Capacity Charge on all new or larger retail water meters installed. The charge is designed to recover a proportionate share of the capital costs associated with providing services to new connections in the Water Authority’s service area. In May 2005, the Board of Directors of the Water Authority approved a change in the System Capacity Charge calculation methodology, which balances the extra capacity present in the system financed by existing customers with the benefits of use by future customers. The System Capacity Charge is currently $4,326 per meter equivalent.
Treatment Capacity Charge: In May 2005, the Board of Directors of the Water Authority also approved the creation of a Treatment Capacity Charge to help fund the Water Authority’s regional water treatment facility. The charge recovers a portion of the capital costs from the future users of the facility. Like the System Capacity Charge, the fee is based upon the size of the meter installed. The Treatment Capacity Charge is currently $166 per meter equivalent.

Revenues from System Capacity Charges and Treatment Capacity Charges are related directly to development activity in the Water Authority service area. Reductions in building activity such as those experienced in recent years may result in the receipt by the Water Authority of significantly lower System Capacity Charge and Treatment Capacity Charge revenues. See APPENDIX B – ECONOMY OF SAN DIEGO COUNTY – Building Activity.

Bankruptcy or Financial Failure of a Member Agency

The financial failure or bankruptcy of a member agency could adversely affect the ability of such member agency to honor its obligations to the Water Authority (including its obligation to pay the purchase price of water delivered by the Water Authority to such member agency). The Water Authority is not aware of the existing or impending financial failure or bankruptcy of any member agency, but there can be no assurance that a financial failure or bankruptcy of a member agency will not occur. If a member agency were to become bankrupt, the Water Authority’s right to receive payment for water delivered prior to bankruptcy but not invoiced or invoiced but not paid, for example, may be limited to the rights of an unsecured creditor of the bankrupt entity. Further, there can be no assurance that the Water Authority will be physically able or legally permitted to cease or interrupt deliveries of water to a non-paying member agency. The Water Authority believes that any reduction in Water Revenues as a result of the inability to collect payment for water delivered to a bankrupt member agency or as a result of any temporary interruption or reduction of water deliveries will not be material. The Water Authority further believes that, following such bankruptcy, the amount of water delivered for the service area currently served by such member agency will not be reduced and that the Water Authority will be able to obtain payment for such water.

Other Water Authority Sources of Funds

The Water Authority receives hydroelectric power sales revenues, property tax revenues and subsidy payments from the United States Treasury relating to Build America Bonds.

Hydroelectric Power Sales Revenues. The Water Authority derives small amounts of operating revenue from hydroelectric sales and from miscellaneous fees and charges. The Water Authority currently sells energy to SDG&E from its Rancho Penasquitos Pressure Control Facility. The Water Authority’s Lake Hodges facility was fully operational in August 2012.

Property Tax Revenues. The Water Authority receives a portion of the one percent ad valorem property tax levied and collected by the County of San Diego pursuant to Article XIII A of the California Constitution. Member agencies of the Water Authority may elect to pay in-lieu charges instead of the tax levy. The Water Authority’s share of ad valorem tax revenues allocated by the County that is not used to pay voter-approved indebtedness is available to pay Maintenance and Operation Costs. There is currently no voter-approved indebtedness outstanding. The Water Authority is expressly empowered under the Act to levy taxes on all taxable property within its boundaries for the purpose of paying its voter-approved indebtedness and, subject to certain limitations in the Act, the California Revenue and Taxation Code and the California Constitution, for other Water Authority purposes. See CONSTITUTIONAL LIMITATIONS.

Proposition 1A, enacted by California voters in 2004 as an amendment to the State Constitution, is intended to, among other things, stabilize local government revenue sources by restricting the State’s control over local property taxes. Proposition 1A allows the State to divert up to eight percent of local property tax revenues for State purposes only if: (i) the Governor declares such action to be necessary due to a State fiscal emergency; (ii) two-thirds of both houses of the Legislature approve the action; (iii) the amount diverted is required by statute to be repaid within three years; (iv) the State does not owe any repayment to local agencies for past property tax or Vehicle License Fee diversions to local agencies; and (v) such property tax diversions do not occur in more than two of any ten consecutive fiscal years.
The amended fiscal year 2009-2010 State Budget included a Proposition 1A diversion of $1.935 billion in local property tax revenues from cities, counties, and special districts to the State to offset State general fund spending for education and other programs. Such diverted revenues must be repaid, with interest, no later than June 30, 2013. Property tax revenues in the amount of approximately $644,000 that would have been received by the Water Authority in the fiscal year ended June 30, 2010 were so diverted.

Build America Bond Interest Subsidy Payments. The Water Authority is entitled to receive Interest Subsidy Payments in connection with the payment by the Water Authority of interest on the 2010B Bonds.

Cost of MWD Water

The water rates charged by MWD for delivered water are the principal cost to the Water Authority of MWD water. However, the Water Authority is also obligated to pay MWD’s Readiness-to-Serve (“RTS”) Charge and Capacity Reservation Charge (“CRC”), which are described below. The Water Authority’s policy is to pass through all of MWD’s charges to the Water Authority’s member agencies. Currently, MWD has three classes of water service:

Full Service Water. Full service water service, formerly known as non-interruptible water service, includes water sold for domestic and municipal uses. Full service sales are expected to remain the major component of MWD water sales in the future. Full service water sales are subject to the applicable Supply Rate (Tier 1 or Tier 2), Delta Supply Surcharge, System Access Rate, System Power Rate and the Water Stewardship Rate, which are discussed below. Effective January 1, 2013, the combined rate is $593 per acre-foot for untreated Tier 1 deliveries and $847 per acre-foot for treated Tier 1 deliveries.

Interim Agricultural Water Program. This program, adopted in 1994, provided a discounted rate for agricultural water users that are permitted to receive only surplus water not needed for domestic or commercial use. This program has been phased out.

Replenishment. Replenishment water is sold when surplus water is available for delivery, to be used by the purchasing member agency to offset demands on MWD in times of shortage. Although discussions on the replenishment program are continuing with MWD’s member agencies, no water is available under this program at this time.

MWD’s water rates are established by majority vote of the MWD Board and are not subject to regulation by the California Public Utilities Commission or by any other local, state or federal agency. Rates must be lawful and, subject to certain provisions of the MWD Act, be uniform for any class of service, and no water may be provided free of charge. Under the MWD Act, MWD is required, so far as is practicable, to fix such rate or rates for water as will result in revenue which will pay the operating expenses of MWD, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by MWD and provide for the payment of the interest and principal of the bonded debt of MWD, subject to the applicable provisions of the MWD Act authorizing the issuance and retirement of such bonds.

The current rate structure unbundles MWD’s water rate into separate rates and charges intended to reflect the different services (System Power Rate, Treatment Surcharge, System Access Rate, and Water Stewardship Rate) provided by MWD. MWD’s rate structure also includes a two-tiered block pricing structure for water supply.

The two-tiered block pricing structure is based upon MWD member agencies’ commitment to purchase water from MWD by means of a voluntary purchase order. MWD member agencies that execute a purchase order with MWD would have access to purchase a greater volume of water at MWD’s more favorable Tier 1 water rate. The original purchase order had a 1-year term, expiring on December 31, 2012. The MWD board recently approved the extension of the purchase order by an additional 2 years. The amended purchase order now expires on December 31, 2014.

The Water Authority executed a purchase order agreeing to purchase a minimum of 3,342,571 acre-feet of water over the ten years ending December 31, 2012. The Water Authority met its purchase order obligation by June 2010. In December 2012, under direction of the Board, the Water Authority executed a purchase order extension under protest. By extending the purchase order, the Water Authority agreed to purchase a minimum of 4,011,085
acre-feet of MWD water supplies over the term of the amended agreement, ending December 31, 2014. The Water Authority had already met its amended agreement obligation by October 30, 2012. In January 2013, MWD General Counsel rejected the Water Authority executed purchase order stating it was improperly executed.

In April 2012, the MWD Board approved a 5 percent rate increase that took effect January 1, 2013. That increase assumed water sales of 1.7 million acre-feet and a $1.366 billion revenue requirement to be paid from rates and charges.

The following adopted MWD rates and charges became effective January 1, 2013 and will remain in effect until December 31, 2013:

**Tier 1 and Tier 2 Water Supply Rates:** The Tier 1 and Tier 2 Water Supply Rates are designed to recover MWD’s water supply costs. The Tier 2 Water Supply Rate is designed to reflect MWD’s costs of acquiring new supplies. MWD member agencies will be charged the Tier 1 or Tier 2 Water Supply Rate for water purchases, as described above. Effective January 1, 2013, the Tier 1 Water Supply Rate is $140 per acre-foot and the Tier 2 Water Supply Rate is $290 per acre-foot.

**Delta Supply Surcharge:** The Delta Supply Charge, which began in 2010, was created to reflect the impact of Delta pumping restrictions on MWD’s financing. This charge has been suspended.

**System Access Rate:** The System Access Rate is intended to recover a portion of the costs associated with the conveyance and distribution system, including capital, operating and maintenance costs. All users (including member agencies and third-party wheeling entities) of the MWD system will pay the System Access Rate. Effective January 1, 2013, the System Access Rate is $223 per acre-foot.

**Water Stewardship Rate:** The Water Stewardship Rate will be charged on a dollar per acre-foot basis to collect revenues to support MWD’s financial commitment to conservation, water recycling, groundwater recovery and other water management programs approved by MWD. The Water Stewardship Rate will be charged for every acre-foot of water conveyed by MWD. Effective January 1, 2013, the Water Stewardship Rate is $41 per acre-foot.

**System Power Rate:** The System Power Rate will be charged on a dollar per acre-foot basis to recover the cost of power necessary to pump water from the SWP and Colorado River through the conveyance and distribution system for MWD’s member agencies. The System Power Rate will be charged for all MWD supplies. Entities wheeling water will continue to pay the actual cost of power to convey water on the SWP, the Colorado River Aqueduct or the MWD distribution system, whichever is applicable. Effective January 1, 2013, the System Power Rate is $189 per acre-foot.

**Treatment Surcharge:** MWD will continue to charge a treatment surcharge on a dollar per acre-foot basis on treated deliveries. The treatment surcharge is set to recover the cost of providing treated water service, including capital and operating costs. Effective January 1, 2013, the Treatment Surcharge is $254 per acre-foot.

**MWD Fixed Charges.** In addition to the rates and charges discussed above, MWD also levies fixed charges on its member agencies. The Water Authority treats these charges as direct pass-through costs and allocates them to member agencies based upon water deliveries.

**Capacity Reservation Charge:** The CRC is a fixed charge levied on the maximum per day demand placed with the system by the member agency. Effective January 1, 2013, the CRC is $6,400 per cubic foot per second of maximum daily flow requested. The Water Authority’s Board has directed that the CRC will be recovered proportionately based on a five-year rolling average of member agency flows during coincidental peak weeks. For the calendar year 2013 the charge is $6,753,920.

**Readiness-to-Serve Charge:** MWD’s RTS charge is designed to recover the principal and interest payments on non-tax supported debt service issued to fund capital improvements necessary to meet continuing reliability and water quality needs associated with current demands. For fiscal year ended June 30, 2013 the Water Authority’s RTS charge was $35,881,578.
MWD member agencies have the option to utilize MWD’s existing standby charge as a means to collect their RTS charge. Standby charge collections are credited against the member agencies’ RTS charges. The Water Authority has elected to collect a portion of its RTS charge through standby charges. The standby charge levied within the Water Authority’s service area to finance the Water Authority’s RTS obligation is presently $11.51 per parcel. These charges generated $12,133,443 in the fiscal year ended June 30, 2011. Standby charges are classified as assessments by the terms of Article XIIID of the California Constitution. See CONSTITUTIONAL LIMITATIONS.

The net RTS charge to the Water Authority for the fiscal year ended June 30, 2011 was $23,240,491, which included MWD’s administrative fees, and was passed through to the Water Authority’s member agencies. The net RTS charge is allocated among MWD member agencies on the basis of each agency’s ten-year rolling average of firm demands (including water transfers and exchanges conveyed through system capacity). This allocation is revised each year.

Other MWD Levies and Impositions. MWD also levies ad valorem taxes on property within the Water Authority’s service area, which MWD collects directly from San Diego County.

MWD Water Rate Challenge. The Water Authority filed San Diego County Water Authority v Metropolitan Water District of Southern California. et al. on June 11, 2010 challenging MWD’s 2011 and 2012 rates. On June 8, 2012, the Water Authority filed a new lawsuit against MWD challenging its 2013 and 2014 rates. The core legal issues and facts in these two cases are basically the same. Each lawsuit asserts that MWD’s rates assign water supply costs to transportation in violation of State law and the State constitution. Both cases allege that the water rates set by MWD discriminate against the Water Authority by artificially inflating the price charged for wheeling (transporting) water independently obtained by the Water Authority through MWD’s pipes by an improper allocation of certain SWP costs and the Water Stewardship Rate to the wheeling rate it charges the Water Authority, amounting to at least $38 million per year of overcharges by MWD to the Water Authority. The Water Authority is the only MWD member agency that uses the pipelines MWD controls to transport a large volume of water it obtains from elsewhere. See WATER AUTHORITY WATER SUPPLY – Quantification Settlement Agreement.

The Water Authority's lawsuits also challenge MWD’s termination and withholding of further subsidy funding agreements with the Water Authority as a result of its rate challenge. In addition, the Water Authority asserts that MWD incorrectly excluded the transportation revenues it collects from the Water Authority in its calculation of the preferential rights, further discriminating against the Water Authority.

Both lawsuits are being managed in the San Francisco Superior Court. On November 9, 2012, the presiding judge granted the Water Authority's motion to consolidate the two cases. The ruling means the pre-trial process for the two cases will proceed as one case and be heard in a single trial, while allowing for the judge to make separate ruling in each case.

Cost of IID Water

The rate charged for untreated IID water for calendar year 2013 is $993 per acre-foot inclusive of the MWD wheeling charge. The cost of the IID water consists of (1) the price paid to IID, and (2) the MWD charge for exchanging the transfer water at Lake Havasu for a like amount delivered to the Water Authority in its service area. On December 21, 2009 the Water Authority and IID settled a dispute over the price per acre-foot for conserved water and executed a Fifth Amendment to the Water Transfer Agreement. Pursuant to the amendment, the price per acre-foot for IID water (exclusive of MWD transportation charge) for calendar years 2014 through 2015 is $594 and $624 per acre-foot respectively.

For calendar years 2016 through 2034, the price per acre-foot will be based on the annual increase in the Gross Domestic Product Implicit Price Deflator as published by the Bureau of Economic Analysis of the United States Department of Commerce in the Survey of Current Business applied to the prior year price per acre-foot. Under the Fifth Amendment to the Water Transfer Agreement, the Water Authority paid IID $6,000,000 on December 31, 2009 and $50,000,000 on October 1, 2010. If a transfer stoppage occurs as a result of pending QSA litigation after the fifty million dollar payment is made, IID shall pay to the Water Authority the following amount, as identified on the table set forth below.
Transfer Stoppage Date  | Amount of IID Repayment
--- | ---
2013 | 20,000,000
2014 | 15,000,000
2015 | 12,000,000
2016 | 9,000,000
2017 | 6,000,000
2018 | 5,000,000
2019 | 5,000,000
2020 | 5,000,000
2021-2034 | 0

See WATER AUTHORITY WATER SUPPLY – Quantification Settlement Agreement - Quantification Settlement Agreement Related Litigation. Beginning in 2035, either the Water Authority or IID can, if certain criteria are met, elect a market rate price through a formula described in the Water Transfer Agreement. The 2013 adopted cost for MWD’s exchange of water, or the wheeling rate, is $453 per acre-foot from January 1 through December 31, 2013. The adopted rate for 2014 is $445 per acre-foot from January 1 through December 31, 2014. Future wheeling rates shall be equal to the charge set by MWD pursuant to applicable law and regulation generally applicable to the conveyance of water by MWD on behalf of its member agencies. See Cost of MWD Water.

See INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA.

Cost of Water Conserved from Canal Lining Projects

The Water Authority will not pay a supply cost for water received from the AACLP and CCLP; however, an estimated $10 per acre-foot will be necessary for operations and maintenance expenses at the canals. Any construction cost that exceeds State funding will be recovered in the Melded M&I Supply Rate. The total project cost of the CCLP was $129 million of which $84 million was available from the State General Fund and Proposition 50 funds. The total project cost for the AACLP was $319 million of which was $170 million was available from the State General Fund, Proposition 50 funds, and Proposition 84 funds. The Water Authority financed the costs that exceeded State funding on both canal lining projects. The Water Authority will pay MWD the same wheeling rate for this water as it will pay for the IID transfer water. See WATER AUTHORITY WATER SUPPLY - Quantification Settlement Agreement.

Cost of Seawater Desalination Water from Carlsbad Project

The Carlsbad Project’s Desalination Water Purchase Agreement establishes a contract price for water delivered and establishes both conditions precedent for contract price changes and limits on the cumulative change in contract price over the contract term. The per-acre-foot charge for water made available from the Carlsbad Project will be calculated to produce an amount sufficient to pay debt service on the Series 2012 Plant Bonds, an equity return and variable and fixed operating costs, including certain costs relating to consumable inputs, such as energy and chemicals, and labor at the Carlsbad Project. While there are efficiency requirements in the Desalination Water Purchase Agreement governing the Carlsbad Project’s energy consumption, Poseidon will ultimately pass-through the energy costs to the Water Authority. Other costs associated with the project, including replacement chemicals and labor; are indexed to inflation.

The unit cost for water from the Carlsbad Project, inclusive of debt service on the Desalination Bonds, will be $_____ and $______ per acre-foot in 2016 and 2017, respectively, for production at a 48,000 acre-feet per year level. Product water delivered to the Water Authority from the Carlsbad Project in excess of the 48,000 acre-feet annual commitment at the request of the Water Authority will be supplied, subject to availability, at rates equal to the variable costs of producing such water, including charges for electricity, plus $195 per acre-foot. See Financial Commitments Related to the Carlsbad Project and WATER AUTHORITY WATER SUPPLY – Future Water Supply – Supply Diversification.
Fixed Rate Debt

The Water Authority has no voter-authorized general obligation water bonds and there are no authorized but unissued general obligation bonds of the Water Authority.

Upon issuance of the 2013A Bonds, obligations comprised of 1998A Certificates, 2002A Certificates, 2004A Certificates, 2005A Certificates, 2008A Certificates, 2010A Bonds, 2010B Bonds, 2011A Bonds and 2011B Bonds in aggregate principal amounts of $11,685,000, $17,510,000, $___________*, $95,730,000, $556,150,000, $98,495,000, $526,135,000, $139,945,000 and $94,540,000, respectively, will be outstanding. See PLAN OF REFUNDING. The 2013B Bonds are Bonds payable from Net Water Revenues on a parity with this outstanding fixed rate debt. The Water Authority issued the 2011S-1 Bonds in the aggregate principal amount of $86,630,000 on July 21, 2011 as fixed-rate Subordinate Obligations. See WATER AUTHORITY DEBT.

Variable Rate Debt

The Water Authority’s only form of variable rate debt outstanding consists of commercial paper notes, which were issued in an initial aggregate principal amount of $40,000,000 in November 1995. Commercial Paper Notes in the aggregate principal amount of $360,000,000 are currently outstanding. The Commercial Paper Notes and certain payments to the banks providing liquidity support for the Commercial Paper Notes are Subordinate Obligations. The Water Authority currently projects to commence the reduction of the amount of outstanding commercial paper in 2020.

The Water Authority has no interest rate exposure relating to auction rate securities. The Water Authority has not entered into any interest rate swap agreements or similar hedging arrangements with respect to its outstanding debt obligations, nor is it permitted to do so under its current debt management policy.

The following table sets forth the outstanding series of commercial paper notes, the provider of each line of credit supporting such series, the facility expiration date, and the principal component supported by each facility. The Water Authority is currently evaluating options for addressing the expiring BLB and Barclays Bank facilities.

<table>
<thead>
<tr>
<th>Series</th>
<th>Line of Credit Provider</th>
<th>Facility Expiration Date</th>
<th>Principal Amount of Notes Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bayerische Landesbank, acting through its New York Branch</td>
<td>June 30, 2013</td>
<td>$110,000,000</td>
</tr>
<tr>
<td>4</td>
<td>Barclays Bank PLC</td>
<td>June 28, 2013</td>
<td>100,000,000</td>
</tr>
<tr>
<td>5</td>
<td>Wells Fargo Bank, National Association</td>
<td>June 27, 2014</td>
<td>100,000,000</td>
</tr>
<tr>
<td>6</td>
<td>Citibank, N.A.</td>
<td>June 27, 2014</td>
<td>50,000,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>$360,000,000</td>
</tr>
</tbody>
</table>

Financial Commitments Related to the Carlsbad Project

The Carlsbad Project has been financed in part with proceeds of the Desalination Bonds issued by the CPCFA on December 24, 2012. The proceeds of the Series 2012 Plant Bonds, issued in an aggregate principal amount of $530,345,000, were loaned to Poseidon pursuant to a Loan Agreement, dated December 24, 2012 (the “Desalination Plant Loan Agreement”), between the CPCFA and Poseidon, for the purpose of financing the cost of acquiring, constructing, installing, improving and equipping of the desalination plant and certain related and ancillary facilities. The proceeds of the Series 2012 Pipeline Bonds, issued in an aggregate principal amount of $203,215,000, were loaned to the San Diego County Water Authority Financing Agency pursuant to a Pipeline Loan

* Preliminary, subject to change.
In connection with the Carlsbad Project, the Water Authority entered into the Desalination Water Purchase Agreement with Poseidon. Payments to be made by the Water Authority under Desalination Water Purchase Agreement with Poseidon are contingent upon the commencement of commercial operation of the Carlsbad Project and ongoing deliveries of product water of the quality and in the quantities specified in the Desalination Water Purchase Agreement. Following the commencement of commercial operation of the Carlsbad Project, the Desalination Water Purchase Agreement obligates the Water Authority to purchase from Poseidon, and obligates Poseidon to sell to the Water Authority, all of the product water produced by the Carlsbad Project meeting the Water Authority’s quality standards. The Water Authority has agreed to purchase from the Carlsbad Project annually, following commencement of commercial operation, a minimum of 48,000 acre-feet of product water meeting such standards, subject to availability of qualifying water from the Carlsbad Project. Upon request of the Water Authority, Poseidon must supply to the Water Authority up to an additional 8,000 acre-feet of water, totaling 56,000 acre-feet of water annually from the Carlsbad Project, an amount accounting for roughly one-third of all water generated within the Water Authority service area. Assuming Poseidon makes available product water from the Carlsbad Project of the quality and in the annual quantities contemplated under the Desalination Water Purchase Agreement, the Water Authority’s payments for product water under the Desalination Water Purchase Agreement will be in amounts sufficient to pay debt service on the Series 2012 Plant Bonds, fixed and variable operating costs of the desalination plant, and a negotiated return on equity to Poseidon’s investors.

In connection with the Carlsbad Project and the construction of the Desalination Pipeline, the Water Authority entered into the Desalination Installment Sale Agreement with the San Diego County Water Authority Financing Agency pursuant to which the Water Authority agreed to make certain installment sale payments (the “Desalination Installment Payments”) to the San Diego County Water Authority Financing Agency for the construction and purchase of the Desalination Pipeline, and the Water Authority has agreed to act as the agent for the San Diego County Water Authority Financing Agency with respect to the construction of the Desalination Pipeline. In addition, the Water Authority entered into the Desalination Pipeline DBA with Poseidon pursuant to which Poseidon is obligated to undertake the design and construction of the Desalination Pipeline. Poseidon, in turn, entered into a Product Water Delivery System Engineering, Procurement and Construction Contract with Kiewit Shea Desalination, a joint venture of Kiewit Infrastructure West Co. and J.F. Shea Construction Company, providing for the construction of the Desalination Pipeline.

Loan repayments to be made by the San Diego County Water Authority Financing Agency to CPCFA pursuant to the Desalination Pipeline Loan Agreement are payable solely from the proceeds of Desalination Installment Payments the San Diego County Water Authority Financing Agency receives from the Water Authority. The Water Authority is not obligated to make any Desalination Installment Payments until the Carlsbad Project has commenced commercial operation. Following the commencement of commercial operation of the Carlsbad Project, Desalination Installment Payments will be payable in an amount equal to principal and interest on the Series 2012 Pipeline Bonds coming due, together with amounts necessary to satisfy reserve requirements relating to the Series 2012 Pipeline Bonds and certain fees and expenses of the trustee for such bonds. The Water Authority’s obligation to make such Desalination Installment Payments will, however, be reduced by certain amounts already on deposit.
with the trustee for payment of the Series 2012 Pipeline Bonds and by certain amounts payable by Poseidon under the Desalination Water Purchase Agreement and the Desalination Pipeline DBA relating to Poseidon’s failure to perform specified obligations under those agreements resulting in construction delays or product water delivery failures, whether or not Poseidon actually pays such amounts.

Scheduled annual debt service payments on the Series 2012 Plant Bonds and the Series 2012 Pipeline Bonds range from approximately $26.5 million and $10 million, respectively, in the first full fiscal year following commencement of commercial operations to a high of approximately $52.2 million and $19.7 million, respectively, in the fiscal year ending June 30, 2045. Total costs payable by the Water Authority for 48,000 acre-feet of product water during the first full fiscal year following commercial operation of the Carlsbad Project, including debt service on the Desalination Bonds and certain operating and maintenance expenses of the Carlsbad Project (subject to the availability of product water meeting the Water Authority’s quality standards pursuant to the terms of the Desalination Water Purchase Agreement), are projected to be approximately $____ million.

Purchases of water pursuant to the Desalination Water Purchase Agreement will constitute Operation and Maintenance Costs, while installment payments to be made pursuant to the Desalination Installment Sale Agreement are obligations payable from amounts constituting Net Water Revenues on deposit in the General Reserve Fund established under the General Resolution, subordinate to the pledge of Net Water Revenues for the payment of Bonds, Contracts, Reimbursement Obligations and Subordinate Obligations. See SECURITY AND SOURCES OF PAYMENT.

After 30 years of plant operation, the Water Authority has the option, but not the obligation, to purchase the plant for $1. The Water Authority also has the right to buy the facility after 10 years for a negotiated amount, though it is not required to do so.

**Future Financial Commitments Related to the QSA**

The following future financial commitments of the Water Authority related to the QSA are all payable from Net Water Revenues on a subordinate basis to debt service on the Subordinate Obligations.

**Socioeconomic Mitigation Payments.** On May 8, 2007 the Water Authority and IID executed an agreement that settled all disputes related to the payment by the Water Authority for potential third-party socioeconomic impacts from the water transfer. The value of the settlement was $50 million, of which the Water Authority agreed to pay $40 million. The Water Authority has already paid $25.3 million into a fund for potential socioeconomic impacts and the remaining $14.7 million will be paid in equal annual installments of $2.94 million between 2013 and 2017. IID and the Water Authority recognize that in exchange for the commitments in the settlement agreement between the two parties, IID will remain solely responsible for any additional socioeconomic mitigation funding necessary to mitigate the impacts of the IID fallowing program for transfer of conserved water to the Water Authority and to mitigate impacts on the Salton Sea in connection with the water transfer should the SWRCB, the California Legislature, or any court order additional funding for such purpose.

**Water Authority Prepayment for Water.** Pursuant to the Revised Fourth Amendment to the Conserved Water Transfer Agreement between IID and the Water Authority, in December 2007 the Water Authority made a payment of $10 million to IID for future deliveries of water. Beginning in 2018 through the end of 2033, if not repaid sooner, IID will credit the Water Authority’s monthly invoice $55,555.56 plus interest accrued after 2018.

**QSA JPA Environmental Mitigation Payments.** Pursuant to the QSA Funding Agreement, the Water Authority is scheduled to make annual payments through 2025 in support of the environmental mitigation requirements related to the QSA. See WATER AUTHORITY WATER SUPPLY – Quantification Settlement Agreement.

**Financial Management Policies**

In August 2006, the Board adopted two enhancements to the Water Authority’s financial management policies. These policy enhancements are being phased-in over a three year period. The adopted enhancements
include setting a 1.50x coverage target for senior lien debt service (1.00x coverage excluding capacity charges) and setting a new target and maximum fund balance for the Rate Stabilization Fund.

The new target for debt service coverage is designed to both enhance the Water Authority’s credit ratings and increase the cash funding of the CIP. As a result of the increased cash funding of the CIP, the Water Authority anticipates cash will be used to fund approximately 23 percent of the projected CIP expenditures. Due to short term volatility in water sales, the Water Authority does not expect to return to the target level of 1.50x until fiscal year ended June 30, 2014.

The Rate Stabilization Fund is designed to mitigate the negative financial impacts of decreased water sales resulting from wet weather. The enhanced Rate Stabilization Fund target balance is equal to the negative financial impact of 2.5 years of wet weather and the maximum fund balance is set equal to the negative financial impact of 3.5 years of wet weather. The Rate Stabilization Fund is also available to be used to mitigate the impact of extraordinary conservation efforts. As of June 30, 2012, the Water Authority had approximately $51.1 million on deposit in the Rate Stabilization Fund and had a target Rate Stabilization Fund balance of approximately $55.1 million. The Rate Stabilization Fund provides financial protection against drought-induced reductions in water sales as well. While the Water Authority is not obligated to maintain any funds in the Rate Stabilization Fund, achieving the target level is a long-term goal.

Cash and Investments

The Water Authority’s cash and investments are segregated by restricted and unrestricted amounts. Restricted cash and investments include the Pay-as-You-Go, Bond and Debt Service Reserve funds. At June 30, 2012, the breakdown between restricted and unrestricted amounts is as follows:

Current assets:
- Cash and investments $ 92,738,002
- Restricted cash and investments $ 378,779,007
- Total current assets $ 471,517,009

Noncurrent assets:
- Cash and investments $ 92,308,322
- Restricted cash and investments $ 123,218,484
- Total noncurrent assets $ 215,526,806

Total cash and investments $ 687,043,815

See APPENDIX A - WATER AUTHORITY FINANCIAL STATEMENTS.

Investment Policy

The investment policies and practices of the Board of Directors and the Treasurer of the Water Authority are based upon limitations placed on it by governing legislative bodies. These policies have three primary goals:

1. To assure compliance with all Federal, State and local laws governing the investment of monies under the control of the Treasurer.
2. To protect the principal monies entrusted to the Water Authority.
3. To generate the maximum amount of investment income within the parameters of the Water Authority’s Annual Statement of Investment Policy.

The primary objectives of the Water Authority’s investment policy are:

- Safety
- Liquidity
• Yield (after the basic requirements of safety and liquidity have been met)
• Public trust (participants in the investment process are custodians of the public trust)

The Board of Directors reviews and amends the Water Authority’s investment policy from time-to-time.

HISTORICAL OPERATING RESULTS

Water Authority Revenues

Water Sales Revenues. The following table provides the total water sales by the Water Authority during the fiscal years ended June 30, 2008 through June 30, 2012 that resulted in the water sales revenue in the “Gross Receipts from Water Authority Water Sales” table.

HISTORICAL WATER AUTHORITY WATER SALES

<table>
<thead>
<tr>
<th>Fiscal Years Ended June 30</th>
<th>Water Authority Water Sales (af)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>613,952</td>
</tr>
<tr>
<td>2009</td>
<td>558,523</td>
</tr>
<tr>
<td>2010</td>
<td>491,579</td>
</tr>
<tr>
<td>2011</td>
<td>420,298</td>
</tr>
<tr>
<td>2012</td>
<td>442,643</td>
</tr>
</tbody>
</table>

The following table provides a summary of the Water Authority’s gross receipts from water deliveries to member agencies for the fiscal years ended June 30, 2008 through June 30, 2012.
### GROSS RECEIPTS
#### FROM WATER AUTHORITY WATER SALES
#### Fiscal Years Ended June 30
#### (In Thousand Dollars)

<table>
<thead>
<tr>
<th>MEMBER AGENCY</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>$11,751</td>
<td>$14,281</td>
<td>$16,194</td>
<td>$16,729</td>
<td>$18,771</td>
</tr>
<tr>
<td>Del Mar, City of</td>
<td>738</td>
<td>740</td>
<td>838</td>
<td>907</td>
<td>1,008</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>15,250</td>
<td>12,810</td>
<td>14,811</td>
<td>11,058</td>
<td>16,451</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>8,153</td>
<td>9,738</td>
<td>10,972</td>
<td>11,125</td>
<td>12,323</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>21,163</td>
<td>27,076</td>
<td>21,472</td>
<td>17,918</td>
<td>23,684</td>
</tr>
<tr>
<td>Lakeside W.D.</td>
<td>2,511</td>
<td>2,953</td>
<td>3,135</td>
<td>3,397</td>
<td>3,843</td>
</tr>
<tr>
<td>Oceanside, City of</td>
<td>18,253</td>
<td>18,984</td>
<td>19,668</td>
<td>19,669</td>
<td>23,718</td>
</tr>
<tr>
<td>Olivenhain M.W.D.</td>
<td>15,923</td>
<td>14,157</td>
<td>14,279</td>
<td>14,677</td>
<td>17,089</td>
</tr>
<tr>
<td>Otay W.D.</td>
<td>21,129</td>
<td>26,211</td>
<td>29,330</td>
<td>31,332</td>
<td>35,212</td>
</tr>
<tr>
<td>Padre Dam M.W.D.</td>
<td>9,243</td>
<td>10,670</td>
<td>11,555</td>
<td>11,951</td>
<td>13,236</td>
</tr>
<tr>
<td>Pendleton Military Reservation</td>
<td>38</td>
<td>63</td>
<td>63</td>
<td>57</td>
<td>67</td>
</tr>
<tr>
<td>Poway, City of</td>
<td>8,090</td>
<td>8,431</td>
<td>7,733</td>
<td>9,177</td>
<td>10,378</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>14,149</td>
<td>16,989</td>
<td>18,823</td>
<td>17,430</td>
<td>21,335</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td>6,124</td>
<td>5,367</td>
<td>6,155</td>
<td>5,668</td>
<td>6,932</td>
</tr>
<tr>
<td>Rincon del Diablo M.W.D.</td>
<td>3,973</td>
<td>5,478</td>
<td>5,809</td>
<td>6,003</td>
<td>6,794</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>124,187</td>
<td>121,901</td>
<td>140,194</td>
<td>144,473</td>
<td>162,875</td>
</tr>
<tr>
<td>San Dieguito W.D.</td>
<td>2,644</td>
<td>2,356</td>
<td>1,958</td>
<td>1,992</td>
<td>2,803</td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td>5,135</td>
<td>5,060</td>
<td>4,746</td>
<td>4,258</td>
<td>5,937</td>
</tr>
<tr>
<td>Sweetwater Authority</td>
<td>6,605</td>
<td>6,430</td>
<td>9,900</td>
<td>7,309</td>
<td>6,085</td>
</tr>
<tr>
<td>Valllecitos W.D.</td>
<td>13,155</td>
<td>14,081</td>
<td>15,114</td>
<td>16,001</td>
<td>18,391</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>20,670</td>
<td>22,441</td>
<td>25,505</td>
<td>24,542</td>
<td>28,700</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>12,314</td>
<td>11,250</td>
<td>13,145</td>
<td>10,764</td>
<td>13,705</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>1,849</td>
<td>1,311</td>
<td>2,041</td>
<td>1,443</td>
<td>1,186</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$343,047</strong></td>
<td><strong>$358,778</strong></td>
<td><strong>$393,440</strong></td>
<td><strong>$387,880</strong></td>
<td><strong>$450,523</strong></td>
</tr>
</tbody>
</table>

1. Gross sales represent total water sales invoiced less adjustments for certain items such as agricultural and reclaimed water, treatment credits, and infrastructure access charges.
2. Represents sales to the City of National City and South Bay I.D. for which Sweetwater Authority acts as purchasing agent.
3. In addition to the total water sales revenue shown, in some years the Water Authority has also received a minor amount of revenues from adjacent water districts that provide water to customers within the Water Authority’s service area under operating agreements. These revenues are not included in this chart.

**Water Standby Availability Charges.** Total revenues from Water Standby Availability Charges for fiscal years ended June 30, 2011 and June 30, 2012 were $11,255,132 and $11,240,988, respectively.

**System Capacity Charges.** In 1989, the Act was amended to give the Water Authority the power to fix and impose capacity charges upon each member agency within the Water Authority or upon the ultimate users of water delivered by the Water Authority to the member agency. It is the policy of the Board that revenues from this source will be restricted to pay construction expenditures under the CIP and to pay debt service. The current capacity charge is $4,326 per connection under one inch. A factor, depending on the size of the larger meter, is applied to such base charge to determine the cost of each larger meter. Total revenues from Treatment Capacity Charges collected for fiscal years ended June 30, 2011 and June 30, 2012 were $9,953,571 and $10,895,828, respectively.

**Treatment Capacity Charges.** In May 2005, the Board also approved the creation of a Treatment Capacity Charge to help fund the Water Authority’s regional water treatment facility. The charge recovers a portion of the capital costs from the future users of the facility. Total revenues from treatment capacity charges collected for fiscal years ended June 30, 2011 and June 30, 2012 were $367,505 and $202,791, respectively.

**Infrastructure Access Charges.** The IAC charges collected for fiscal years ended June 30, 2011 and June 30, 2012 were $24,507,570 and $27,700,326, respectively.
Non-Operating Revenues. Total revenues from hydroelectric sales for the fiscal years ended June 30, 2011 and June 30, 2012 were $536,969 and $1,306,992, respectively. Other non-operating revenues from fiscal years ended June 30, 2011 and June 30, 2012 totaled $5,553,595 and $4,112,368, respectively.

Property Tax Revenues. Ad valorem tax revenues allocated to the Water Authority by the County, net of payments to the State’s Educational Revenue Augmentation Fund and refunds for the fiscal years ended June 30, 2011 and June 30, 2012 totaled $8,071,041 and $8,240,009, respectively. In-lieu revenue for the fiscal years ended June 30, 2011 and June 30, 2012 totaled $1,583,467 and $1,642,353, respectively.

Operating Expenses and Depreciation and Amortization

The primary component of the Water Authority’s operating expenses consists of the cost of water sales. The cost of water sales primarily consists of water purchases from MWD and IID. For the fiscal years ended June 30, 2011 and June 30, 2012, the cost of water sales was $275,099,372 and $312,446,563, respectively. The balance of operating expenses consists of operations and maintenance, planning and general and administrative costs. For the fiscal years ended June 30, 2011 and June 30, 2012, these costs totaled $39,569,583 and $37,509,963, respectively. Depreciation and amortization charges for the years ended June 30, 2011 and June 30, 2012 totaled $37,364,821 and $51,705,749, respectively.

Summary of Historical Operating Results

The following table summarizes the Water Authority’s operating revenues, operating expenses and net revenues for the five fiscal years ended June 30, 2008 through June 30, 2012. Depreciation and amortization expenses are neither operating expenses nor debt service and are not reflected in the table. The operating revenues, operating expenses and net water revenues in each of said fiscal years shown are derived from the Financial Statements of the Water Authority. The Financial Statements of the Water Authority for the years ended June 30, 2012 and June 30, 2011 and the report thereon Macias, Gini & O’Connell, LLP, Independent Auditors, for fiscal year ended June 30, 2012 and Lance, Soll & Lunghard for fiscal year ending June 30, 2011 are included as Appendix A to this Official Statement. The following table should be read in conjunction with such Financial Statements. Macias, Gini & O’Connell, LLP have not reviewed the following table.

The Water Authority experienced a dramatic decrease in the volume of water sales during the fiscal year ended June 30, 2010 relative to the fiscal year ended June 30, 2009, as a result of extraordinary regional water conservation efforts. Nevertheless, water sales revenues increased by $27.9 million or 8% during the same period, as a combined result of increases in rates and charges, including a mid-year rate increase in September 2009, and a significant level of fixed charges that result in a revenue stream that is less sensitive to changes in sales volumes. Operating expenses increased by $18.2 million or 6% during the same period, primarily as a result in the increase in the cost of water, which was offset by $2.4 million in operating budget reductions and eliminating purchases of dry-year transfer water. These actions enabled the Water Authority to achieve the Board’s target senior lien debt service coverage of 1.50x.

Fiscal year ended June 30, 2011 proved to be a challenging year. Having recorded the 5th coolest July since the 1930’s and the 9th wettest December since 1850, water sales significantly lagged projections. In an effort to mitigate the financial impact of the reduced water sales in fiscal year ended June 30, 2011, the Water Authority executed a series of cost saving measures. However, in the fiscal year ended June 30, 2012, the Water Authority’s water sales stabilized and moderate increases in water sales were recognized. Increased water sales combined with rate and charge increases resulted in a 16% increase in water sales revenues in the fiscal year ended June 30, 2012. As a result of these financial results, a deposit of $7.25 million was made to the Rate Stabilization Fund in spite of a 14% increase in the cost of sales.

Debt Service Coverage has been calculated in accordance with the provisions of the General Resolution, which excludes deposits to the RSF from Water Revenues and includes withdrawals from the RSF as Water Revenues. In fiscal years ended June 30, 2009 through June 30, 2011 no transfers were made from the RSF. The Debt Service Coverage ratios for fiscal years ended June 30, 2008 through June 30, 2010 were 1.50x. The coverage level in fiscal year ending June 30, 2011 shows a dip in coverage, primarily due to reduced sales, but fiscal year ending June 30, 2012 shows the coverage levels returning to the Board’s 1.50x policy levels and a significant deposit made into the RSF.
## HISTORICAL OPERATING RESULTS
(In Thousand Dollars)*
(Fiscal Years Ended June 30)

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Operating Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water Sales 1</td>
<td>$343,456</td>
<td>$359,952</td>
<td>$387,871</td>
<td>$382,922</td>
</tr>
<tr>
<td></td>
<td>Water Standby Availability Charge</td>
<td>11,256</td>
<td>11,311</td>
<td>11,240</td>
<td>11,255</td>
</tr>
<tr>
<td></td>
<td>Capacity Charges</td>
<td>23,884</td>
<td>13,266</td>
<td>10,299</td>
<td>10,321</td>
</tr>
<tr>
<td></td>
<td>Infrastructure Access Charges 2</td>
<td>17,458</td>
<td>19,390</td>
<td>21,241</td>
<td>24,508</td>
</tr>
<tr>
<td></td>
<td>Total Operating Revenue</td>
<td>396,054</td>
<td>403,919</td>
<td>430,651</td>
<td>429,006</td>
</tr>
<tr>
<td></td>
<td>Plus Withdrawals from or Minus Deposits to the Rate Stabilization Fund</td>
<td>3,866</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>BABs Interest Rate Subsidy 3</td>
<td>—</td>
<td>—</td>
<td>4,615</td>
<td>11,303</td>
</tr>
<tr>
<td></td>
<td>Non-Operating Revenue 4</td>
<td>14,084</td>
<td>8,268</td>
<td>4,372</td>
<td>6,091</td>
</tr>
<tr>
<td></td>
<td>Total Revenues 5</td>
<td>414,004</td>
<td>412,187</td>
<td>439,638</td>
<td>446,400</td>
</tr>
<tr>
<td></td>
<td>Operating Expenses 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Costs of Sales</td>
<td>262,538</td>
<td>269,836</td>
<td>291,385</td>
<td>275,099</td>
</tr>
<tr>
<td></td>
<td>Other Maintenance &amp; Operations Costs 7</td>
<td>36,919</td>
<td>42,724</td>
<td>39,395</td>
<td>39,570</td>
</tr>
<tr>
<td></td>
<td>Total Operating Expenses</td>
<td>299,457</td>
<td>312,560</td>
<td>330,780</td>
<td>314,669</td>
</tr>
<tr>
<td></td>
<td>Application of Net Tax Receipts</td>
<td>10,303</td>
<td>10,467</td>
<td>9,972</td>
<td>9,654</td>
</tr>
<tr>
<td></td>
<td>Net Operating Expenses</td>
<td>289,154</td>
<td>302,093</td>
<td>320,808</td>
<td>305,015</td>
</tr>
<tr>
<td></td>
<td>Net Water Revenue Available for Debt Service</td>
<td>124,850</td>
<td>110,094</td>
<td>118,830</td>
<td>141,385</td>
</tr>
<tr>
<td></td>
<td>Revenue Supported Debt Service 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1993A Certificates</td>
<td>14,395</td>
<td>14,352</td>
<td>—</td>
<td>—</td>
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<tr>
<td></td>
<td>1997A Certificates</td>
<td>20,864</td>
<td>1,358</td>
<td>1,358</td>
<td>18,690</td>
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<tr>
<td></td>
<td>1998A Certificates</td>
<td>2,930</td>
<td>2,732</td>
<td>1,347</td>
<td>555</td>
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<tr>
<td></td>
<td>2002A Certificates</td>
<td>18,345</td>
<td>18,343</td>
<td>18,342</td>
<td>18,341</td>
</tr>
<tr>
<td></td>
<td>2004A Certificates</td>
<td>20,929</td>
<td>20,929</td>
<td>20,929</td>
<td>20,929</td>
</tr>
<tr>
<td></td>
<td>2005A Certificates</td>
<td>5,581</td>
<td>5,581</td>
<td>5,581</td>
<td>5,581</td>
</tr>
<tr>
<td></td>
<td>2008A Certificates</td>
<td>—</td>
<td>9,767</td>
<td>26,291</td>
<td>26,291</td>
</tr>
<tr>
<td></td>
<td>2010A&amp;B Bonds</td>
<td>—</td>
<td>—</td>
<td>5,585</td>
<td>13,676</td>
</tr>
<tr>
<td></td>
<td>2011A Bonds</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td></td>
<td>2011B Bonds</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Subordinate Obligation Payments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commercial Paper 13</td>
<td>3,536</td>
<td>7,071</td>
<td>3,197</td>
<td>3,111</td>
</tr>
<tr>
<td></td>
<td>2011S-1 Bonds</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Total Subordinate Obligation Payments</td>
<td>3,536</td>
<td>7,071</td>
<td>3,192</td>
<td>3,111</td>
</tr>
<tr>
<td></td>
<td>Total Bonds Debt Service</td>
<td>83,044</td>
<td>73,062</td>
<td>79,433</td>
<td>104,063</td>
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<tr>
<td></td>
<td>Balance Available After Debt Service and Subordinate Obligation Payments</td>
<td>38,270</td>
<td>29,961</td>
<td>36,200</td>
<td>34,211</td>
</tr>
<tr>
<td></td>
<td>Bonds Debt Service Coverage Ratio (Per General Resolution)</td>
<td>1.50x</td>
<td>1.50x</td>
<td>1.50x</td>
<td>1.36x</td>
</tr>
<tr>
<td></td>
<td>Bonds Debt Service Coverage Ratio (Build America Bonds adjustment) 15</td>
<td>1.50x</td>
<td>1.50x</td>
<td>1.53x</td>
<td>1.40x</td>
</tr>
<tr>
<td></td>
<td>Bonds Debt Service and Subordinate Obligation Coverage Ratio 16</td>
<td>1.45x</td>
<td>1.39x</td>
<td>1.46x</td>
<td>1.34x</td>
</tr>
</tbody>
</table>
Some amounts are prepared on a basis other than generally accepted accounting principles.

1. Water sales represent accrued sales to member agencies, as well as a small amount of revenues from the treatment of raw water and certain miscellaneous income items. See Water Sales Revenue.

2. Infrastructure access charge was implemented January 1999 and is levied on retail water meters within the service area. See Infrastructure Access Charge.

3. Build America Bonds receive a 35 percent subsidy of interest payable from the United States Treasury.

4. Non-operating revenue consists of interest earnings on Water Authority funds (excluding interest earnings on bond proceeds and the Rate Stabilization Fund) and other revenues (hydroelectric sales, penalties, etc.).

5. Total revenues include amounts transferred to and from the Rate Stabilization Fund, and excludes interest on debt proceeds, property taxes, contributions in aid of capital assets, and CIP grant reimbursements.

6. Operating expenses exclude depreciation and amortization expenses.

7. Includes operations, maintenance, planning, and general and administrative costs; excludes capital equipment purchases.

8. Includes only debt service on Water Authority indebtedness payable from net water revenues. Senior lien debt service does not include trustee fees.

9. Excludes $18,023,409 interest payment on 2008A COPs which was paid with bond proceeds.

10. Excludes $1,500,000 interest payment on the 2008A COPs and $9,530,000 interest payment on the 2010A&B Bonds, which was paid with bond proceeds.

11. Excludes $1,500,000 interest payment on the 2008A COPs and $23,340,158 interest payment on the 2010A&B Bonds, which was paid with bond proceeds.

12. Excludes $18,447,012 interest payment on the 2010A&B Bonds, which was paid with bond proceeds.

13. Includes the commercial paper program interest costs and program fees. No other subordinate debt was outstanding.

14. Excludes $9,783,772 interest payment on 2006 CP which was paid with commercial paper proceeds.

15. Adjusted to treat federal interest subsidy payments for Build America Bonds as a reduction in Debt Service rather than as an addition to Other Revenues. See SECURITY AND SOURCES OF PAYMENT – Rate Covenant.

16. Coverage ratios do not include program fees.
PROJECTED OPERATING RESULTS

The Water Authority’s Long-Range Financing Plan (“LRFP”) serves as the financial foundation supporting the long-term strategic objectives of the Water Authority to deliver a safe and reliable water supply to member agencies. The development and update of the LRFP is a collaborative process involving significant member agency input and review at both the staff and Board levels. The LRFP is based upon the Water Authority’s Facilities Master Plan and provides long-term forecasts of revenues and expenditures for both operating and capital investment activities. It also contains detailed discussions of fund policies and investment objectives, capital financing sources and strategies, reserve policies, and sensitivity analyses. The LRFP was last updated and adopted by the Board in April 2008 and serves as the foundation for the capital financing plan incorporated into the projections presented herein. The LRFP is not part of this Official Statement and is not incorporated by reference herein.

In addition to the LRFP, the Water Authority has a long history of financial planning activities. In January 2007, the Water Authority’s Board of Directors created the Comprehensive Reliability and Cost Assessment Ad-Hoc (“CRACA”) Committee to review the CIP and analyze the impact of CIP changes on water supply reliability and rates and charges. The CRACA Committee evaluated each CIP project based upon its contribution to system reliability and cost. Projects identified with a low impact on reliability and a high cost were considered for re-prioritization, deferral or removal from the CIP. The CRACA Committee also developed a comprehensive set of assumptions to be used for planning purposes. These assumptions include conservation, development of local supplies, water sales, population and others. The Committee’s findings and recommended CIP scenario was adopted by the Water Authority’s Board of Directors in March 2007.

In mid-2008, in response to the extraordinary water supply and economic conditions facing the Water Authority, the CRACA Committee reconvened to develop early guidance on future rate and charge levels to support Water Authority and member agency financial planning. Since the 2004 Master Plan was validated during the 2007 CRACA process, the CRACA “Lite” scope was narrowed to focus on supply related issues, re-costing major CIP projects, project scheduling and updating the other foundational assumptions, specifically MWD’s rates and charges. At the time this process was initiated, there was significant uncertainty regarding water supply and MWD rates and charges. Therefore, the CRACA Committee developed a high and a low rate scenario to bookend the potential outcomes.

In late 2010, in response to the continued economic downturn, prolonged drought, water supply challenges facing the region and significant reductions in water demands, the CRACA Committee was reconvened to review the CIP program again. The focus of this review was on the impact water demand may have on the need to construct certain new facilities and to identify any that could be re-prioritized. Based upon their review, the Committee recommended that 14 projects or approximately $150 million in CIP expenditures be delayed so as to better align construction with the need for the project.

In addition to the latest CRACA activities, high/low rate and charge forecasts were developed in February 2011 to support member agency financial planning efforts. The high/low rate and charge forecasts were based upon varying CIP expenditure and water sales levels and MWD rate and charge increases. This is the most recent rate and charge guidance provided to member agencies. In addition, the Water Authority is preparing to engage in a comprehensive review of its fiscal sustainability with its member agencies and other stakeholders. This review will include evaluating the current rate and charge structure and financial policies to ensure that both are in alignment, still achieving their objectives and continue to support the prudent financial management of the Water Authority. A key element of the fiscal sustainability review will be how to best integrate the Carlsbad Desalination Project costs into the Water Authority’s rate and charge structure.

With the bi-annual budget process for fiscal years ending June 30, 2014 and June 30, 2015 just beginning, only the projections for fiscal year ending June 30, 2013 are adopted by the Board. All remaining projections are preliminary and subject to change once the multi-year budget for fiscal years ending June 30, 2014 and June 30, 2015 is adopted. Furthermore, with the Board’s approval of the Carlsbad Desalination Project on November 29, 2012, all of the financial projections include the annual delivery of 48,000 acre feet at the contracted price adjusted for expected inflation starting in fiscal year ending June 30, 2016. It is important to note that the cost of desalinated water is only included in the cost of sales estimates and is subject to change depending on the results of the fiscal sustainability review and how the Carlsbad Project costs are ultimately recovered through the Water Authority rates and charges.
The following table showing the projection of Water Authority revenues, expenses and debt service coverage for the five-year period ending June 30, 2017, to reflect the terms of the 2013A Bonds and the refunding described in PLAN OF REFUNDING, has been prepared by the Water Authority and reflects certain significant assumptions. It is based upon the Water Authority’s judgment of the most probable occurrence of certain important future events and upon certain information provided to it. The assumptions described below are material in the development of the Water Authority’s financial projections, and variations in the assumptions may produce substantially different financial results. Actual operating results achieved during the projection period may vary from those presented in the projection and such variations may be material. The Water Authority’s independent auditors, Macias, Gini & O’Connell, LLP, have not examined, reviewed, or compiled the accompanying projections and accordingly, they assume no responsibility for such projections.
### PROJECTED OPERATING RESULTS

**(In Thousand Dollars)**

**Fiscal Years Ending June 30**

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Sales$^1$</td>
<td>$491,116</td>
<td>$531,923</td>
<td>$592,107</td>
<td>$679,415</td>
<td>$750,932</td>
</tr>
<tr>
<td>Water Standby Availability Charge</td>
<td>11,249</td>
<td>11,266</td>
<td>11,283</td>
<td>11,300</td>
<td>11,317</td>
</tr>
<tr>
<td>Capacity Charges$^2$</td>
<td>10,489</td>
<td>10,595</td>
<td>10,601</td>
<td>10,607</td>
<td>10,613</td>
</tr>
<tr>
<td>Infrastructure Access Charges$^3$</td>
<td>28,675</td>
<td>29,196</td>
<td>30,500</td>
<td>32,804</td>
<td>35,502</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>560,665</strong></td>
<td><strong>604,882</strong></td>
<td><strong>643,864</strong></td>
<td><strong>738,829</strong></td>
<td><strong>819,753</strong></td>
</tr>
</tbody>
</table>

|                         |          |          |          |          |          |
| **Expenses**            |          |          |          |          |          |
| Operating Expenses$^7$   |          |          |          |          |          |
| Cost of Sales$^4$        | 349,351  | 369,475  | 405,142  | 495,425  | 563,555  |
| Other Maintenance & Operations Costs$^9$ | 46,785  | 48,524   | 50,316   | 51,825   | 53,740   |
| **Total Operating Expenses** | **396,136** | **417,999** | **455,457** | **547,250** | **617,295** |
| Application of Net Tax Receipts | 10,833  | 11,050   | 11,271   | 11,496   | 11,726   |
| **Net Operating Expenses** | **385,303** | **406,949** | **444,186** | **535,754** | **605,569** |
| Net Water Revenue Available for Debt Service | 175,362 | 197,933  | 199,678  | 203,074  | 214,184  |

| **Revenue Supported Debt Service$^10$** |          |          |          |          |          |
| 1997A Certificates       | -        | -        | -        | -        | -        |
| 1998A Certificates       | 555      | 555      | 555      | 555      | 555      |
| 2002A Certificates       | 876      | 876      | 876      | 876      | 876      |
| 2004A Certificates       | 19,068   | 19,068   | 19,068   | 19,068   | 19,068   |
| 2005A Certificates       | 17,127   | 16,852   | 17,113   | 17,771   | 17,157   |
| 2008A Certificates       | 36,776   | 38,181   | 39,071   | 39,377   | 39,959   |
| 2010A&B Bonds           | 37,017   | 38,576   | 39,497   | 40,800   | 40,795   |
| 2011A Bonds             | 13,289   | 13,237   | 13,232   | 13,230   | 13,224   |
| 2011B Bonds             | 4,707    | 4,707    | 4,707    | 4,707    | 4,707    |
| 2013A Bonds             |          |          |          |          |          |
| Total Bonds Debt Service | 129,415  | 132,051  | 133,119  | 135,383  | 142,790  |
| Subordinate Obligation Payments$^11$ | 11,930  | 14,634   | 18,575   | 24,057   | 26,861   |
| Balance Available After Debt Service and Subordinate Obligation Payments | 34,018 | 51,249   | 47,984   | 43,635   | 44,533   |
| Bonds Debt Service Coverage Ratio (Per General Resolution)$^12$ | 1.36x   | 1.50x    | 1.50x    | 1.50x    | 1.50x    |
| Bonds Debt Service Coverage Ratio (Build America Bonds adjustment)$^13$ | 1.39x   | 1.55x    | 1.55x    | 1.55x    | 1.54x    |
| Bonds Debt Service and Subordinate Obligation Coverage Ratio$^14$ | 1.24x   | 1.35x    | 1.32x    | 1.27x    | 1.26x    |

* Totals may not add due to rounding.
1. See **Water Sales Revenue** for water-sales and water-rate projects.
2. Includes System Capacity Charge and Treatment Capacity Charge revenues.
3. See **Infrastructure Access Charge** for an explanation of this charge.
4. Build America Bonds receive a 35 percent subsidy of interest payable from the United States Treasury.
5. Non-operating revenue consists of interest earnings on Water Authority funds (excluding interest earnings on bond proceeds and the Rate Stabilization Fund) and other revenues (hydroelectric sales, penalties, etc.).
6. Total revenues include amounts transferred to and from the Rate Stabilization Fund, and excludes interest on debt proceeds, property taxes, contributions in aid of capital assets and CIP grant reimbursements.
7. Operating expenses exclude depreciation and amortization expenses.
8. Reflects the Water Authority’s MWD rate estimates and includes the operating costs of the Water Authority’s Twin Oaks Valley Water Treatment Plant and starting in FY 2016 the cost of the desalinated water purchased under the Water Purchase Agreement.
9. Excludes the operating costs of the Water Authority’s Twin Oaks Valley Water Treatment Plant and minor capital equipment purchases.
11. Includes debt service on 2011S-1 Bonds and assumed debt service on Commercial Paper Notes, including interest on Commercial Paper Notes and program fees.
12. For FY2016 and FY2017, “Cost of Water Sales” includes Desalination Installment Payments, which do not constitute Maintenance and Operations Costs under the General Resolution. See **FINANCIAL OPERATIONS – Financial Commitments Relating to the Carlsbad Project**. Were Desalination Installment Payments not so included, “Costs of Water Sales” would have been $ in FY2016 and $ in FY2017 and Bonds Debt Service Coverage Ratio (Per General Resolution) would have been _x in FY2016 and _x in FY2017.
13. Adjusted to treat federal interest subsidy payments for Build America Bonds as a reduction in Debt Service rather than as an addition to Other Revenues. See **SECURITY AND SOURCES OF PAYMENT – Rate Covenant**.
14. Includes debt service on 2011S-1 Bonds and assumed debt service on the Commercial Paper Notes in accordance with the Water Authority’s current financial projections. Coverage ratios do not include program fees.
Projected Operating Revenue

**Water Sales Revenue.** Projected water sales revenue is based on the amount of water projected to be purchased by member agencies from the Water Authority and the prices charged by the Water Authority for such water. The forecast of water sales has taken into consideration estimates made by MWD about the availability of water supplies for delivery to its member agencies, including the Water Authority, and considers the water available through the contractual commitments of the QSA. See WATER AUTHORITY WATER SUPPLY – Quantification Settlement Agreement – Quantification Settlement Agreement Related Litigation.

Fiscal year ended June 30, 2012 provided a slight rebound in sales but the levels are well below those observed four to five years ago. On June 23, 2012, the Water Authority’s Board of Directors approved a 9.7% increase in the cost of treated water purchased by member agencies in calendar year 2013. The increase in calendar year 2013 rates and charges was driven by increases in the cost of water, specifically MWD costs, and the Water Authority’s annual debt service payments.

The largest determinant of the Water Authority’s long-term projected water sales is expected demand from its member agencies. The demand forecast includes both M&I water demand and agricultural water demand. For M&I demand, which accounts for approximately 90 percent of total water demand within the Water Authority’s service area, the Water Authority uses a computer model developed by Planning and Management Consultants, Ltd. ("PMCL"), to forecast sectorial based regional water demands. The “CWA-MAIN,” model utilizes data from the SANDAG’s 2030 Regional Forecast, including number of persons per household by housing type, housing density, household income and employment counts by major industry group. This demographic and economic data are used by the model to compute water demand trends anticipated to occur in the Water Authority’s service area over the next 20 years. The model also includes assumptions concerning pricing and water conservation in the post-1990 period. The Water Authority anticipates continued reduced sales as a result of (1) above average local supplies due to above average rainfall and (2) the residual impacts of the recent conservation efforts and rate increases on residential water demand.

Agricultural water demand accounts for approximately ten percent of total water demand within the Water Authority’s service area. See MEMBER AGENCY WATER USAGE – Agricultural Water Usage. Since the early 1990s, agricultural demands have ranged from a low of 43,515 acre-feet in fiscal year ended June 30, 2010, to over 100,000 acre-feet in fiscal year ended June 30, 2004. Agricultural water demand projections for the Water Authority’s service area were developed by PMCL. Forecast estimates were based on SANDAG land use projections, crop-type distribution data from DWR, and regional crop water use coefficients. MWD began the three year phase-out of the IAWP in calendar year 2010. As part of the phase-out, IAWP customers are able to opt out of the program at the start of each calendar year and become M&I customers. The Water Authority’s Tier 1 allocation was modified to reflect the IAWP opt outs. IAWP customers that opted out of the program may enter the Water Authority’s Transitional SAWR program, which will be replaced by the Water Authority’s permanent SAWR program after December 31, 2014. The phase-out of the IAWP was completed on December 31, 2012. Agricultural water demand is projected to remain relatively flat at the current levels due to reductions in demand as a result of conservation efforts as well as changes in the make-up of the regions agribusiness, which has shifted from fruit crops towards floriculture and other higher value crops.
The following table provides the total water demand forecast used to project water sales revenue in the “Projected Operating Results” table above. The projected increase between actual fiscal year ended June 30, 2012 and forecasted fiscal year ending June 30, 2013 Water Authority sales is attributable to a return of demand moderated by both weather and conservation efforts. The sales forecast is shown in the table below and incorporated into the financial projections provided above.

### PROJECTED WATER AUTHORITY WATER SALES

<table>
<thead>
<tr>
<th>Fiscal Years Ended June 30</th>
<th>Water Authority Water Sales (af)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>452,036</td>
</tr>
<tr>
<td>2014</td>
<td>475,768</td>
</tr>
<tr>
<td>2015</td>
<td>499,556</td>
</tr>
<tr>
<td>2016</td>
<td>514,443</td>
</tr>
<tr>
<td>2017</td>
<td>523,927</td>
</tr>
</tbody>
</table>

1 Water sales projections shown are those used in most recent rate setting analyses.

The water sales revenue projection is also based on Water Authority water rates charged per acre-foot and through fixed charges by the Water Authority for each fiscal year of the projection period. The Water Authority melds the cost of water purchases from MWD, IID and desalination and adds an additional component to provide the balance of revenues not provided through other rates and charges to finance its operating and capital costs. The charges for water purchased from MWD have varied over recent years, and the current charges are $593 per acre-foot for untreated non-interruptible water and $847 per acre-foot for treated non-interruptible water. The projection assumes the MWD rate structure adopted April 2012 for calendar years 2013 and 2014 and assumes an annual increase thereafter that reflects supply and future infrastructure investments (e.g. Bay-Delta improvements). Current indications are that the Water Authority will be able to purchase the majority of its water at MWD’s Tier 1 rate. Projections assume that approximately 50 percent of the water sold is treated water sales. Furthermore, with the Water Authority’s Twin Oaks Valley Water Treatment Plant in operation, treated water purchases from MWD are projected to be significantly lower than in the past.

The estimated average treated water rate is projected to go from $1,259/AF to $1,579/AF over the projection period due to among other things the scheduled delivery of desalinated water from the Carlsbad Project. The average rate includes both the Water Authority’s commodity rates, which includes the Melded Supply & Treatment and Transportation, and the fixed charges (Storage and Customer Service) converted to a $/AF estimate based upon projected sales. It is important to note that this is just an average and the actual rates paid by each member agency will vary depending on their water usage.

If water sales, or other expected revenues, should be less than required to meet the Water Authority’s financial obligations, the Water Authority expects to use monies in the Rate Stabilization Fund and, if necessary, to increase its water rates.

Water Standby Availability Charges. The number of acres or parcels to which the Water Standby Availability Charges apply is projected based upon fiscal year ended June 30, 2012 collections and the SANDAG 2020 population forecast, indicating housing units and non-residential developed acres. Water standby availability charge collections for the fiscal year ending June 30, 2012 were $11.2 million. Water standby availability charges are projected to be relatively flat through fiscal year ending June 30, 2017.

Capacity Charges. In fiscal year ended June 30, 2006, the capacity charge revenue, which includes the System Capacity and the Treatment Capacity charges revenue, peaked at $33.9 million and subsequently has plummeted. For fiscal year ended June 30, 2012 capacity charge revenue was $11.1 million. Capacity charge revenue is projected to be relatively flat increasing from $10.5 million in fiscal year ending June 30, 2013 to $10.6 million in fiscal year ending June 30, 2017. The capacity charges are expected to be administratively adjusted annually for regional inflation.
Infrastructure Access Charge. The IAC is based upon the total household meter equivalents within each member agency service area as of December 31st of the previous year. The intent of the IAC is to provide the Water Authority with the balance of “fixed” revenues required to generate a 25 percent ratio of fixed revenues to fixed expenditures, taking into account the Water Authority’s existing fixed revenues produced by the Water Standby Availability Charge and property taxes. The Water Authority’s Infrastructure Access Charge was set at $1.00 per meter equivalent per month at its inception on January 1, 1999. The IAC is currently set at $2.65 per meter equivalent and is expected to generate approximately $28.7 million in the fiscal year ending June 30, 2013, and is expected to increase to $35.5 million by the end of the forecast period in the fiscal year ending June 30, 2017. Increasing debt service and operating expenses will increase the amount of revenues required to be generated by the IAC, increasing this charge to approximately $3.37 per meter equivalent per month by the end of the forecast period. The future level of this charge will be impacted by the Carlsbad Project’s cost if the Board decides to incorporate the project’s costs into this charge.

Non-Operating Revenue. This includes revenues derived from the Water Authority’s hydroelectric facilities. The hydroelectric revenues are projected to ramp up to $3.9 million by the fiscal year ending June 30, 2017. Other non-operating revenue consists of revenues derived from the investment of Water Authority funds, including the proceeds of debt issuances. This revenue is based upon conservative investment earnings rates and projected fund balances during the projection period. Total Non-Operating Revenues is projected to reach $16.0 million by the fiscal year ending June 30, 2017.

Property Tax Revenues. Tax revenues are used to offset certain operating expenditures of the Water Authority. The net tax revenues and in-lieu charges were $9.9 million for the fiscal year ended June 30, 2012 and are expected to grow to $11.7 million by the fiscal year ending June 30, 2017.

Rate Stabilization Fund Transfers. The Rate Stabilization Fund (“RSF”) was established for the purpose of avoiding fluctuations in the water rate. A $7.3 million deposit into the RSF for the fiscal year ended June 30, 2012 was completed, increasing the balance to $51.1 million. Beginning in the fiscal year ending June 30, 2015, the Water Authority is projecting deposits to further replenish the fund balances.

Projected Operating Expenses

MWD Water Purchases. The Water Authority purchases its water from MWD at rates set by MWD. The Water Authority passes MWD water costs through to member agencies and adds its additional water supply rate component. MWD’s calendar year 2013 rate is $593 per acre-foot of untreated non-interruptible water and $874 per acre-foot of treated non-interruptible water. The MWD water purchases reflect the calendar year 2013 average rate increase of 5% adopted by MWD’s Board in April 2012.

The Water Authority assumes in its projections that approximately one half of the water sold is treated water. With the commissioning of the Water Authority’s Twin Oaks Valley Water Treatment Plant, treated water purchases from MWD are projected to decrease significantly. Historically, 90 percent of the Water Authority’s treated water was supplied by MWD. Looking forward, more untreated water will be purchased from MWD and treated at the Water Authority’s new treatment facility and supplied by the desalination plant. This lowers the percent of treated water supplied by MWD to 26 percent in calendar year 2017. This reduction in MWD treated water purchases lowers the projected cost of MWD water but increases the Water Authority’s costs, which includes the cost of operating the new treatment facility and of purchasing desalinated water. Because of the MWD’s recent rate volatility, only limited rate and charge projections data is available from MWD. As a result, the Water Authority Water projects MWD’s rates and charges based upon supply and infrastructure cost projections.

In addition to the cost of water based upon MWD water rates, MWD also charges its member agencies a Readiness-to-Serve Charge and a Capacity Charge.

The Readiness-to-Serve Charge (“RTS Charge”) is a fixed charge based upon average historical water purchases by MWD member agencies. The charge is offset each year by the amount of MWD standby charge collected within the Water Authority’s service area to produce a “net” RTS Charge payable by the Water Authority as part of purchased water costs. The Water Authority also passes this charge through to its member agencies based upon the identical calculation methodology used by MWD to apportion the charge among its member agencies. The
The table provided below provides a projection of the RTS Charge payable by the Water Authority over the next five fiscal years. The net RTS Charge also includes administrative costs imposed by MWD.

### PROJECTED MWD READINESS-TO-SERVE CHARGE
### PAYABLE BY THE WATER AUTHORITY

<table>
<thead>
<tr>
<th>Fiscal Years Ending June 30</th>
<th>Gross RTS</th>
<th>MWD Assessed</th>
<th>Standby Credit</th>
<th>Net RTS Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$35,881,578</td>
<td>$(12,640,887)</td>
<td>$23,240,691</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>37,316,841</td>
<td>(12,767,296)</td>
<td>24,549,545</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>38,809,515</td>
<td>(12,894,969)</td>
<td>25,914,546</td>
<td></td>
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<tr>
<td>2016</td>
<td>40,361,895</td>
<td>(13,023,919)</td>
<td>27,337,977</td>
<td></td>
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<tr>
<td>2017</td>
<td>41,976,371</td>
<td>(13,154,158)</td>
<td>28,822,213</td>
<td></td>
</tr>
</tbody>
</table>

**Cost of IID Water.** The cost of IID water is projected to be $1,209 per acre-foot by the fiscal year ending June 30, 2017, including MWD wheeling charges.

**Cost of All-American Canal Lining Project and Coachella Canal Lining Project Water.** The cost of water from the canal lining projects is projected to be $550 per acre-foot by the fiscal year ending June 30, 2017, including MWD wheeling charges.

**Cost of the Carlsbad Project.** Beginning in fiscal year ending June 30, 2016, the desalination plant is projected to produce a minimum of 48,000 acre feet a year. Of the 48,000 acre feet of water produced by the desalination plant, the Water Authority expects to receive at least 42,000 acre feet with remaining 6,000 acre feet being purchased directly by Water Authority member agencies. For planning purposes, the cost of the desalinated water is included in the cost of water. The contract price for desalinated water in fiscal year ending June 30, 2016 and June 30, 2017 are $________ and $________, respectively.

**Other Maintenance and Operations Costs.** Other Water Authority operating expenses, consisting of system operations and maintenance, planning and general and administrative costs are projected to be approximately $46.8 million in the fiscal year ended June 30, 2013, which is the last year of the current multi-year budget. Costs are projected to be $48.5 million in the fiscal year ending June 30, 2014 based upon inflation expectations the operation of the Water Authority’s ESP program. Future increases due to inflation and the administration of the desalination water purchase contract are projected to increase operating expenditures to $53.7 million in fiscal year ending June 30, 2017.

**Debt Service.** During the five-year projection period, the Water Authority plans on utilizing the remaining proceeds of the 2010B Bonds to fund the majority of CIP expenditures. Over the projection period, long and short term debt (including existing debt) are expected to fund approximately $346.9 million and $77.4 million of capital over the projection period, respectively. The “Projected Operating Results” table reflects the debt service impact of anticipated new long-term debt issuance. Interest on the anticipated long-term debt issues is projected to be fully capitalized during construction periods to levelize annual debt service.

In addition to the projections provided in this section, the Water Authority expects to continue the financing of its CIP, including the ESP, through a combination of funds, including proceeds derived from the sale of long-term fixed rate debt, variable rate debt and cash generated from Water Authority operations. Overall, the Water Authority plans to fund approximately 23 percent of its $3.6 billion CIP with cash and the balance from a combination of long-term fixed rate debt, short-term debt and variable rate debt. The financial projections included in this Official Statement reflect a long-term adherence to the overall funding ratio, rather than an attempt to maintain this ratio of funding in individual years.
CONSTITUTIONAL LIMITATIONS

Article XIII

The taxing powers of California public agencies are limited by Article XIII of the California Constitution, added by an initiative amendment approved by the voters on June 6, 1978, and commonly known as Proposition 13.

Article XIII limits the maximum ad valorem tax on real property to one percent of “full cash value,” which is defined as “the County Assessor’s valuation of real property as shown on the fiscal year 1975-76 tax bill under ‘full cash value’ or, thereafter, the appraised value of real property when purchased, newly constructed, or a change in ownership has occurred after the 1975 assessment.” The full cash value may be adjusted annually to reflect inflation at a rate not to exceed 2 percent per year, or reduction in the consumer price index or comparable local data, or declining property value caused by damage, destruction, or other factors.

The tax rate limitation referred to above does not apply to ad valorem taxes to pay the debt service on any indebtedness approved by the voters before July 1, 1978, or on any bonded indebtedness for the acquisition or improvement of real property approved by two-thirds of the votes cast by the voters voting on the proposition.

Under the terms of Article XIII and pursuant to an allocation system created by implementing legislation, each county is required to levy the maximum ad valorem tax permitted by Article XIII and to distribute the proceeds to local agencies, including special districts such as the Water Authority. The allocation of property tax revenues among special districts, while subject to certain statutory procedures and criteria, is largely discretionary with each county.

Assessed valuation growth allowed under Article XIII (new construction, change of ownership and 2 percent annual value growth) is allocated on the basis of sites among the jurisdictions that serve the tax rate area within which the growth occurs. Local agencies and schools share the growth of base revenues from the tax rate area. Each year’s growth allocation becomes part of each agency’s allocation in the following year. The availability of revenues from tax bases to such entities may be affected by the establishment of redevelopment agencies that, under certain circumstances, may be entitled to such revenues resulting from the upgrading of certain property values.

Under California law, any fee that exceeds the reasonable cost of providing the service for which the fee is charged may be considered a “special tax,” which under Article XIII must be authorized by a two-thirds vote of the electorate. Accordingly, if a portion of the Water Authority’s water user rates or capacity charges were determined by a court to exceed the reasonable cost of providing service, the Water Authority would not be permitted to continue to collect that portion unless it were authorized to do so by a two-thirds majority of the votes cast in an election to authorize the collection of that portion of the rates or fees. If the Water Authority were unable to obtain such a two-thirds majority vote, such failure could adversely affect the Water Authority’s ability to pay the debt service with respect to the 2013A Bonds. However, the reasonable cost of providing water services has been determined by the State Controller to include depreciation and allowance for the cost of capital improvements. In addition, the California courts have determined that fees such as capacity charges will not be special taxes if they approximate the reasonable cost of constructing the water system improvements contemplated by the local agency imposing the fee.

The United States Supreme Court has upheld Article XIII against a challenge alleging violation of equal protection under the Fourteenth Amendment to the United States Constitution.

Articles XIIIIC and XIIIID

Proposition 218, a State ballot initiative known as the “Right to Vote on Taxes Act,” was approved by the voters on November 5, 1996. The initiative added Articles XIIIIC and XIIIID to the California Constitution, creating additional requirements for the imposition by most local governments of “general taxes,” “special taxes,” “assessments,” “fees,” and “charges.” The Water Authority and its members are local governments within the meaning of Articles XIIIIC and XIIIID. Articles XIIIIC and XIIIID became effective, pursuant to their terms, as of November 6, 1996, although compliance with some of the provisions was deferred until July 1, 1997, and certain of
the provisions purport to apply to any tax imposed for general governmental purposes (i.e., “general taxes”) imposed, extended or increased on or after January 1, 1995 and prior to November 6, 1996.

Article XIIID imposes substantive and procedural requirements on the imposition, extension or increase of any “fee” or “charge” subject to its provisions. A “fee” or “charge” subject to Article XIIID includes any levy, other than an ad valorem tax, special tax or assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership. Article XIIID prohibits, among other things, the imposition of any proposed fee or charge, and, possibly, the increase of any existing fee or charge, in the event written protests against the proposed fee or charge are presented at a required public hearing on the fee or charge by a majority of owners of the parcels upon which the fee or charge is to be imposed. Except for fees and charges for water, sewer and refuse collection services, the approval of a majority of the property owners subject to the fee or charge, or at the option of the agency, by a two-thirds vote of the electorate residing in the affected area, is required within 45 days following the public hearing on any such proposed new or increased fee or charge. In the view of the Water Authority, rates for water usage charged by the Water Authority to its member agencies are not fees or charges under Article XIIID, although no assurance may be given by the Water Authority that a court would not determine otherwise.

The California Supreme Court decisions in Richmond v. Shasta Community Services District, 32 Cal. 4th 409 (2004) (“Richmond”), and Bighorn-Desert View Water Authority vs. Verjil (published July 24, 2006) (“Bighorn”) have clarified some of the uncertainty surrounding the applicability of Section 6 of Article XIIID to service fees and charges. In Richmond, the Shasta Community Services District charged a water connection fee, which included a capacity charge for capital improvements to the water system and a fire suppression charge. The Court held that both the capacity charge and the fire suppression charge were not subject to Article XIIID because a water connection fee is not a property-related fee or charge because it results from the property owner’s voluntary decision to apply for the connection. Under this reasoning the Water Authority’s capacity charge is not subject to Article XIIID. In both Richmond and Bighorn, however, the Court stated that a fee for ongoing water service through an existing connection is imposed “as an incident of property ownership” within the meaning of Article XIIID, rejecting, in Bighorn, the argument that consumption-based water charges are not imposed “as an incident of property ownership” but as a result of the voluntary decisions of customers as to how much water to use.

Article XIIID also provides that “standby charges” are considered “assessments” and must follow the procedures required for “assessments” under Article XIIID and imposes several procedural requirements for the imposition of any assessment, which may include (1) various notice requirements, including the requirement to mail a ballot to owners of the affected property; (2) the substitution of a property owner ballot procedure for the traditional written protest procedure, and providing that “majority protest” exists when ballots (weighted according to proportional financial obligation) submitted in opposition exceed ballots in favor of the assessments; and (3) the requirement that the levying entity “separate the general benefits from the special benefits conferred on a parcel” of land. The Water Authority has not increased its Water Standby Availability Charge since the enactment of Article XIIID. Any increase to the Water Authority’s current standby charge could require notice to property owners and approval by a majority of such owners returning mail-in ballots approving or rejecting any imposition or increase of such standby charge. Article XIIID also precludes standby charges for services that are not immediately available to the parcel being charged. This could adversely impact the ability of the Water Authority and its member agencies to collect standby charges on undeveloped land.

Article XIIID provides that all existing, new or increased assessments are to comply with its provisions beginning July 1, 1997. Existing assessments imposed on or before November 5, 1996, and “imposed exclusively to finance the capital costs or maintenance and operations expenses for water” are exempted from some of the provisions of Article XIIID applicable to assessments. The Water Authority has authorized and imposed water standby charges since 1989.

Article XIIIC extends the people’s initiative power to reduce or repeal previously authorized local taxes, assessments, fees and charges. This extension of the initiative power is not limited by the terms of Article XIIIC to fees, taxes, assessment fees and charges imposed after November 6, 1996 and absent other authority could result in retroactive reduction in any existing taxes, assessments, fees or charges. In Bighorn, the Court concluded that under Article XIIIC local voters by initiative may reduce a public agency water rates and delivery charges. The Court noted, however, that it was not holding that the authorized initiative power is free of all limitations, stating that it was not determining whether the electorate’s initiative power is subject to the public agency statutory obligation to set water service charges at a level that will “pay the operating expenses of the agency, … provide for repairs and
depreciation of works, provide a reasonable surplus for improvements, extensions, and enlargements, pay the interest on any bonded debt, and provide a sinking or other fund for the payment of the principal of such debt as it may become due."

No assurance may be given that Articles XIIIC and XIIID will not have a material adverse impact on the Water Authority’s revenues.

**Proposition 26**

On November 2, 2010, the California voters approved Proposition 26, an initiative measure amending Article XIIIC of the California Constitution. Proposition 26 adds a new definition of “tax” applicable to local government agencies to include any levy, charge, or exaction imposed by a local government, except: charges imposed for benefits or privileges or for services or products granted or provided to the payor (and not to those not charged) that do not exceed their reasonable cost; regulatory fees that do not exceed the cost of regulation; fees for the use of local governmental property; fines and penalties imposed for violations of law; fees imposed as a condition of property development; and assessments and property-related fees imposed under Article XIIID of the California Constitution. California local taxes are subject to voter approval. The Water Authority believes its water rates and charges are not taxes as defined by California Constitution Article XIIIC, Section 1(e), added by Proposition 26.

**Other Initiative Measures**

Article XIII A, Articles XIIIC and XIIID and Proposition 26 were adopted pursuant to California’s constitutional initiative process. From time to time other initiative measures could be adopted by California voters, placing additional limitations on the ability of the Water Authority to increase revenues.

**TAX STATUS**

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, based on an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2013A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the “Code”) and is exempt from State of California personal income taxes. Bond Counsel is further of the opinion that interest on the 2013A Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Bond Counsel observes that interest on the 2013A Bonds is included in adjusted current earnings when calculating federal corporate alternative minimum taxable income. A complete copy of the proposed opinion of Bond Counsel is set forth in Appendix F hereto.

The difference between the issue price of any maturity of the 2013A Bonds with an issue price less than par and the amount to be paid at maturity of such 2013A Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2013A Bonds) constitutes “original issue discount,” the accrual of which, to the extent properly allocable to each owner thereof, is treated as interest which is excluded from gross income for federal income tax purposes and State of California personal income taxes. For this purpose, the issue price of a particular maturity of the 2013A Bonds is the first price at which a substantial amount of such maturity of the 2013A Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the 2013A Bonds accrues daily over the term to maturity of such 2013A Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2013A Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2013A Bonds. Owners of the 2013A Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2013A Bonds with original issue discount, including the treatment of purchasers who do not purchase such 2013A Bonds in the original offering to the public at the first price at which a substantial amount of such 2013A Bonds are sold to the public.

2013A Bonds purchased, whether at original issuance or otherwise, for an amount greater than their principal amount payable at maturity (or, in some cases, at their earlier call date) (“Premium Bonds”) will be treated
as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of obligations, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax exempt interest received, and a purchaser’s basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such purchaser. Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal tax purposes of interest on obligations such as the 2013A Bonds. The Water Authority has made certain representations and has covenanted to comply with certain restrictions designed to assure that the interest on the 2013A Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in the interest on the 2013A Bonds being included in federal gross income, possibly from the date of issuance of the 2013A Bonds. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken) or events occurring (or not occurring) after the date of issuance of the 2013A Bonds may affect the tax status of the interest on the 2013A Bonds or the value of the 2013A Bonds.

Although Bond Counsel has rendered an opinion that the interest portion on the 2013A Bonds is excluded from gross income for federal income tax purposes, the ownership or disposition of the 2013A Bonds and the accrual or receipt of the interest thereto may otherwise affect a 2013A Bond owner’s tax liability. The nature and extent of these other tax consequences will depend upon each 2013A Bond owner’s particular tax status and the 2013A Bond owner’s other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2013A Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent 2013A Bond owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such future legislative proposals, clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2013A Bonds. Prospective purchasers of the 2013A Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel’s judgment as to the proper treatment of the 2013A Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service (“IRS”) or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of the Water Authority, or about the effect of future changes in the Code, the applicable regulations the interpretation thereof or the enforcement thereof by the IRS. The Water Authority has covenanted, however, to comply with the requirements of the Code.

Bond Counsel’s engagement with respect to the 2013A Bonds ends with the issuance of the 2013A Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the Water Authority or the owners of the 2013A Bonds regarding the tax-exempt status of the 2013A Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the Water Authority, and its appointed counsel, including the owners of the 2013A Bonds, would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which the Water Authority legitimately disagrees, may not be practicable. Any action of the IRS, including but not limited to selection of the 2013A Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the 2013A Bonds, and may cause the Water Authority or the owners of the 2013A Bonds to incur significant expense.

CONTINUING DISCLOSURE

The Water Authority has covenanted for the benefit of the owners and beneficial owners of the 2013A Bonds to provide certain financial information and operating data relating to the 2013A Bonds and the Water
Authority by not later than 270 days after the end of the Water Authority’s fiscal year (presently June 30) commencing with the report for the Water Authority’s 2012-13 fiscal year (the “Annual Disclosure Reports”), and to provide notices of the occurrence of certain enumerated events. The Annual Disclosure Reports and notices of material events will be filed by the Digital Assurance Certification, L.L.C., as Dissemination Agent on behalf of the Water Authority, with the Municipal Securities Rulemaking Board (the “MSRB”). The specific nature of the information to be contained in the Annual Disclosure Reports or the notices of material events is set forth in APPENDIX D - FORM OF CONTINUING DISCLOSURE AGREEMENT. These covenants have been made in order to assist the Underwriters in complying with Rule 15c2-12(b)(5) of the Securities and Exchange Commission (the “Rule”).

As of the date hereof, the Water Authority is in compliance in all material respects with its continuing disclosure undertakings. Certain notices respecting rating changes were filed some period of time after the occurrence of such rating changes, but the Water Authority does not believe that any such delay constituted material noncompliance with any of its continuing disclosure undertakings. The Water Authority has not filed material event notices upon the occurrence of bond insurer downgrades not resulting in rating changes of insured bonds or certificates of participation. The Water Authority has implemented procedures to assure prompt filings of future notices of enumerated events.

RATINGS

The 2013A Bonds have been rated “___” by Fitch, Inc. (“Fitch”), One State Street Plaza, New York, New York, “___” by Moody’s Investors Service, Inc. (“Moody’s”), 7 World Trade Center, 250 Greenwich Street, New York, New York, and “___” by Standard & Poor’s Ratings Services, a Standard & Poor’s Financial Services LLC business, 55 Water Street, New York, New York (“Standard & Poor’s”). The ratings assigned by Fitch, Moody’s and Standard & Poor’s express only the views of the rating agencies. The explanation of the significance of the ratings may be obtained from Fitch, Moody’s and Standard & Poor’s, respectively. There is no assurance such ratings will continue for any given period of time or that such ratings will not be revised downward or withdrawn entirely by the rating agencies, if in the judgment of such rating agencies, circumstances so warrant. Any such downward revision or withdrawal of such ratings may have an adverse effect on the market price of the 2013A Bonds.

VERIFICATION OF MATHEMATICAL COMPUTATIONS

_________________, a firm of independent certified public accountants, upon delivery of the 2013A Bonds, will deliver to the Water Authority its attestation report indicating that it has examined, in accordance with standards established by the American Institute of Certified Public Accountants, the mathematical accuracy of computations provided by the Underwriter, relating to (a) the sufficiency of the anticipated receipts from the direct obligations of the United States, together with the initial cash deposit, if any, to pay, when due, the principal, interest and prepayment premium requirements of the Refunded Certificates and (b) the “yield” on the direct obligations of or obligations guaranteed by the United States and on the 2013A Bonds. See PLAN OF REFUNDING.

The report of ________________ will include the statement that the scope of their engagement was limited to verifying the mathematical accuracy of the computations contained in such schedules provided to them and that they have no obligation to update their report because of events occurring, or data or information coming to their attention, subsequent to the date of their report.

UNDERWRITING

Pursuant to the Contract of Purchase by and between the Water Authority and [___________], as representative of the underwriters (the “Underwriters”), the 2013A Bonds will be purchased jointly and severally for reoffering by the Underwriters at a purchase price of __________, representing the aggregate principal amount of the 2013A Bonds, [plus/less] $_________ of [net] original issue [premium/discount], less an underwriting discount of $_________. The Underwriters may offer and sell 2013A Bonds to certain dealers (including dealers depositing 2013A Bonds into investment trusts) and others at prices lower than the offering prices stated on the cover of this Official Statement. After the initial public offering, the public offering prices of the 2013A Bonds may be changed from time to time by the Underwriters.
LITIGATION

No litigation is pending or threatened concerning the validity or enforceability of the 2013A Bonds or the Indenture.

The Water Authority is subject to lawsuits and claims which arise out of the normal course of business. The Water Authority believes the disposition of such actions of which it is aware will not have a material effect on the financial position, results of operation or liquidity of the Water Authority.

CERTAIN LEGAL MATTERS

Orrick, Herrington & Sutcliffe LLP, San Francisco, California, Bond Counsel, will render an opinion with respect to the 2013A Bonds substantially in the form set forth in Appendix G hereto. Orrick, Herrington & Sutcliffe LLP is also acting as Disclosure Counsel. Certain legal matters will be passed upon for the Water Authority by Daniel S. Hentschke, its General Counsel. Certain legal matters will be passed upon for the Underwriters by [_______], counsel to the underwriters.

FINANCIAL ADVISOR

The Water Authority has retained Montague DeRose and Associates, LLC (“Montague DeRose”), as financial advisor with respect to the issuance and delivery of the 2013A Bonds. Montague DeRose is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement.

INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MWD periodically files official statements and disclosure reports with the MSRB in connection with its publicly offered bonds. Such official statements and disclosure reports contain, among other things, information on MWD, MWD’s water supply and MWD’s rates and charges. Such official statements and disclosure reports are available from the MSRB but are not incorporated by reference herein and neither the Water Authority nor the Underwriters assume any responsibility for the completeness or accuracy thereof. MWD is not obligated in any manner for the payment of principal or interest on the 2013A Bonds and has not provided and will not provide any certifications regarding this Official Statement, nor has MWD made any undertaking for the benefit of the owners and beneficial owners of the 2013A Bonds to file any information with the MSRB.
MISCELLANEOUS

This Official Statement has been duly approved, executed and delivered by the Water Authority. Copies of this Official Statement may be obtained from the Water Authority at 4677 Overland Avenue, San Diego, California 92123.

Financial statements of the Water Authority, summaries of the principal legal documents to be executed and delivered in connection with the offering of the 2013A Bonds, the form of the opinion to be delivered by Bond Counsel, the form of the Continuing Disclosure Agreement, information on the economy of San Diego County and a description of DTC’s book-entry system are attached hereto as Appendices. The Appendices are integral parts of this Official Statement and must be read together with all other parts of this Official Statement.

Insofar as any statements made in this Official Statement involve matters of opinion, forecasts or estimates, whether or not expressly stated, they are set forth as such and not as representations of fact.

The delivery of this Official Statement, including the Appendices and other information herein, has been duly authorized by the Water Authority.

SAN DIEGO COUNTY WATER AUTHORITY

By: ___________________________________
    Chair of the Board of Directors

By: ___________________________________
    General Manager

By: ___________________________________
    Director of Finance/Treasurer
January 16, 2013

Attention: Administrative and Finance Committee

Development of the upcoming Fiscal Years 2014 and 2015 Recommended Budget. 
(Information)

Purpose
To provide the Board an update and to solicit input on the development of the Water Authority’s multi-year budget.

Background
Every other January, staff meets with the Board of Directors to both consider and discuss the anticipated drivers and policy priorities of the upcoming multi-year budget. This input is then incorporated into the development of the General Manager’s recommended budget.

Discussion
The Water Authority continues to operate in an environment characterized by the continued reduction in water demands, the ongoing transition to an operations-based organization, and a slow, long-term economic recovery nationally and regionally. In the upcoming multi-year budget period, the Water Authority will continue to address these budget environment realities, while also ensuring that our work to improve water supply and water system reliability moves forward in a successful and cost-efficient manner.

The Board’s input on budget priorities is essential in the development process. At the January meeting, the Board will have the opportunity to provide input on the above issues and any other items that may need to be addressed. Following this meeting, staff will spend the next few months developing the General Manager’s Recommended Budget, which will be presented to the Board in May. Budget Workshops have been scheduled for the Administrative and Finance Committee on June 11 and 13. Board consideration and adoption of the recommended budget is set for June 27, 2013. A copy of the Budget Development Calendar is attached for your reference.

Prepared by Lisa Celaya, Financial Resources Manager
Reviewed by: Tracy McCraner, Director of Finance/Treasurer
Approved by: Sandy L. Kerl, Deputy General Manager
Approved by: Maureen A. Stapleton, General Manager

Attachment: Budget Development Calendar
### Water Authority Board Meetings

**January 24**
- Discussion on Development of FYs 14&15 Recommended Budget

**April 25**
- Preliminary rate and charge guidance

**May 23**
- A&F Committee Presentation of Recommended Budget Notice of public hearing for 2014 Rates and Charges

**June 11 & 13**
- Special A&F Committee Meeting – Budget Workshops

**June 27**
- Consideration/Adoption of Recommended Budget Hold public hearing on 2014 Rates and Charges

### Member Agency General Manager Meetings

**January 25**
- Present 2014 rates and charges calendar

**February 19**
- Cost of Service study briefing including Carollo (Finance Officers included)

**April 16**
- Cost of Service study update and progress discussion

**May 14**
- Potential update on recommended rates and charges

### Member Agency Finance Officers Meetings

**March**
- Present preliminary rate and charge guidance (level of increase)

**April**
- Preliminary rates and charges
- Cost of Service Study update and progress report

**May**
- Present recommended rates, charges and fixed charge allocations
January 16, 2013

Attention: Administrative and Finance Committee

Board of Directors’ Fourth Quarter 2012 expenses and attendance. (Information)

Discussion
The fourth quarter 2012 expense report includes payments made during each month of the quarter, but not necessarily for all expenses incurred during that quarter. Some Board members batch their claims and submit them all at once, while others submit them on a regular basis. As a result, some reimbursements include expenses incurred outside the reporting period. Board members are allowed up to ninety days to submit reimbursement for meetings attended, however no Board members have been paid per diem in excess of ten per month.

The Special Assignment column indicates Board officers and Board members who represented the Water Authority at outside boards during the fourth quarter 2012 such as: Bud Pocklington at San Diego Area Wastewater Management District; Javier Saunders and John Linden at SANDAG; Elsa Saxod and Bud Pocklington at SANDAG Borders Committee and SANDAG Regional Planning Committee; Bill Knutson and Jim Bond at Colorado River Board; and Yen Tu and Frank Hilliker at the Water Conservation Garden JPA.

The attendance report shows the number of formal and special Board meetings held during the fourth quarter 2012 and the attendance record of each Board member.

Prepared by: Darlene Flynn, Accounting Assistant
Doria F. Lore, Clerk of the Board

Reviewed by: Rod Greek, Controller

Attachments: Board of Directors’ 4th Quarter 2012 Expenses
Board of Directors’ 4th Quarter 2012 Attendance
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This report includes expenses paid directly to, or on behalf of each Director, during the months of October, November, December 2012.
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January 16, 2013

Attention: Administrative and Finance Committee

Controller’s Report on Monthly Financial Reports (Information)

Financial Reports:
Attached for review by the Administrative and Finance Committee and the Board of Directors are the following financial reports:

Attachment A: Water Sales Volumes, in acre-feet
Attachment B: Water Sales Revenues, in millions
Attachment C: Water Purchases and Treatment Costs, in millions
Attachment D: Multi-Year Budget Status Report
Attachment E: Operating Departments/Programs Expenditures, in millions
Attachment F: Schedule of Cash and Investments

The Multi-Year Budget Status Report reflects actual revenues and expenditures, on a budgetary basis, for the seventeen month period of July 1, 2011 through November 30, 2012 (Attachment D). Attachment D has been modified to include information on the source of funding for capital projects. The Multi-Year Budget Status Report compares actual revenues and expenditures to the adopted budget, as amended by the Board. Budgeted amounts for the seventeen month period are presented on a straight-line basis, except for water sales and purchases which are based on projected acre-feet calculated per month. In addition, the period-to-date budgeted amounts were also adjusted for items occurring on a periodic basis which includes the following: property taxes and in-lieu charges, capacity charges, water standby availability charges, debt service, and QSA mitigation.

Net Water Sales Revenue1
Net Water Sales Revenue is the Water Authority’s principal source of revenue and is the difference between the sale of water and the cost of that water. Sales include revenues from variable commodity charges for supply, treatment and transportation, as well as from fixed charges for customer service and storage. Cost of water includes payments to water suppliers such as Metropolitan Water District (MWD) and Imperial Irrigation District (IID).

Net Water Sales Revenue for the seventeen months ended November 30, 2012 was $199.6 million, and the period-to-date budgeted amount was $190.9 million, a difference of $8.7 million or 5% more than budgeted (Attachment D). Detailed information relative to net water sales revenue is described below and shown on Attachments A, B, and C.

Total acre-feet (AF) of water sold were budgeted to be 670,366 AF for the seventeen months ended November 30, 2012, and actual water sales volumes were 675,735 AF, a difference of 5,369 AF or 1% more volume (Attachment A). Total Water Sales revenues for the seventeen months ended

1 All information regarding water sales volumes, revenues and costs are based on the adopted fiscal years 2012 and 2013 multi-year budget.
November 30, 2012 were $678.0 million, which is $8.5 million or 1% more than budgeted sales revenues of $669.5 million (Attachment B). Both water sales volumes and revenues are trending slightly higher than budgeted as shown on Attachments A and B.

Total Water Purchases and Treatment costs were budgeted to be $478.6 million for the seventeen months ended November 30, 2012 and actual costs were on target at $478.4 million (Attachment C). This category includes $54.7 million for the 122,502 AF of water purchased from IID, as well as $84.8 million for MWD’s conveyance charges related to IID, Coachella Canal and All-American Canal water.

Revenues and Other Income
As shown in Attachment D, Total Revenues and Other Income were budgeted to be 127.8 million for the seventeen months ended November 30, 2012, but actual revenues were $123.4 million, a difference of $4.4 million or 3% less than budgeted. The variance is primarily due to the timing of receipts in Other Income which includes Integrated Regional Water Management (IRWM) grants and miscellaneous reimbursements and accounts for approximately $8.8 million of the total variance.

Actual revenues that were below the period-to-date budgeted amounts for the seventeen months ended November 30, 2012 include Investment Income which had a variance of $3.0 million due to continued historic low interest rates.

Actual revenues that exceeded the period-to-date budgeted amounts for the seventeen months ended November 30, 2012 include Hydroelectric Revenue, Capacity Charges, and Contributions in Aid of CIP. Hydroelectric Revenue category was budgeted conservatively for the current two-year budget period and includes only the Rancho Penasquitos Pressure Control and Hydroelectric Facility (Rancho Hydro) budget. As a result, Hydroelectric Revenue is trending higher than budgeted due to hydroelectric power sales of $0.3 million from the Lake Hodges Pumped Storage Facility (Hodges Hydro) which began earning revenue in September 2011 to offset Water Authority costs. Capacity Charges is trending higher than budgeted by approximately $2.1 million due to an increase in the number of permits issued. Contributions in Aid of CIP is trending higher than budgeted due to $5.1 million refund received from SDG&E in September 2012 for the cost of network upgrades for Hodges Hydro.

Expenditures
As shown in Attachment D, Total Expenditures were budgeted to be $289.8 million for the seventeen months ended November 30, 2012, but actual costs were significantly less at $246.8 million, a difference of $43.0 million or 15% less than budgeted. The variance is primarily due to the following: timing of expenditures in the Operating Departments, in addition to the timing of IRWM grants and other miscellaneous expenditures in Other Expenditures. These expenditure categories account for approximately $18.5 million of the total variance.

Actual expenditures which were significantly below the period-to-date budgeted amounts for the seventeen months ended November 30, 2012 include Hodges Pumped Storage and Stored Water Purchases. Hodges Pumped Storage had minimal costs during the seventeen month period because the facility did not become fully operational until late August 2012. Stored Water Purchases were budgeted at $21.1 million for the current two-year budget period for Hodges Hydro and San Vicente Reservoir; however, no water purchases were anticipated in fiscal year 2012. In addition, stored water
purchases for San Vicente Reservoir were originally forecasted to occur towards the end of fiscal year 2013 and are dependent on the dam raise project schedule.

The General Counsel Department is currently trending higher than budgeted due to the timing of expenditures for legal services rendered to date as of the seventeen months ended November 30, 2012.

Attachment D also shows that CIP Expenditures were budgeted to be $230.3 million for the seventeen months ended November 30, 2012, but actual costs were significantly less at $163.9 million or 29% less than budgeted primarily due to the timing of expenditures during the seventeen months of the two-year budget period. Actual CIP expenditures funded by Pay As You Go Fund and CIP/Bond Construction Funds for the seventeen months ended November 30, 2012 were $13.6 million and $150.3 million, respectively.

**Cash and Investments**

For the months ended November 30, and October 31, 2012, the Water Authority’s cash and investments had an overall balance of $682.5 million and $724.9 million, respectively (Attachment F). The decrease is primarily due to debt service payments in the amount of $50.7 million. Approximately 31% of funds are unrestricted with approximately 69% of funds restricted for specific purposes. In order to maximize investment return, the Water Authority pools the cash of the Pay As You Go Fund with unrestricted funds. As of November 30, 2012, the Rate Stabilization Fund is funded at 51.1 million which represents approximately 93% of the targeted amount of $55.1 million.

______________________________
Rod Greek, Controller
*Budgeted amounts are based on the adopted two year budget, and do not reflect any projected revisions that may have previously been communicated to the Board.

### Fiscal Year 2012 Cumulative Water Sales (AF)

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<th>Months</th>
<th>Jul-11</th>
<th>Aug-11</th>
<th>Sep-11</th>
<th>Oct-11</th>
<th>Nov-11</th>
<th>Dec-11</th>
<th>Jan-12</th>
<th>Feb-12</th>
<th>Mar-12</th>
<th>Apr-12</th>
<th>May-12</th>
<th>Jun-12</th>
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<td>(1,177)</td>
<td>(1,990)</td>
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<td>(5,354)</td>
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### Fiscal Year 2013 Cumulative Water Sales (AF)

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<th>Apr-13</th>
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### FY12 through FY13 Difference

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WATER SALES REVENUES
Budget Versus Actual (in Millions $)
for the 17 Months Ended November 30, 2012

*Budgeted amounts are based on the adopted two year budget, and do not reflect any projected revisions that may have previously been communicated to the Board.

Fiscal Year 2012 Cumulative Water Sales (in Millions $)

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<th>Months</th>
<th>Jul-12</th>
<th>Aug-12</th>
<th>Sep-12</th>
<th>Oct-12</th>
<th>Nov-12</th>
<th>Dec-12</th>
<th>Jan-12</th>
<th>Feb-12</th>
<th>Mar-12</th>
<th>Apr-12</th>
<th>May-12</th>
<th>Jun-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Budget (a)</td>
<td>45.5</td>
<td>91.0</td>
<td>133.2</td>
<td>171.2</td>
<td>203.3</td>
<td>233.4</td>
<td>263.0</td>
<td>289.6</td>
<td>318.9</td>
<td>353.3</td>
<td>391.4</td>
<td>434.7</td>
</tr>
<tr>
<td>Actual</td>
<td>43.6</td>
<td>90.7</td>
<td>132.1</td>
<td>170.8</td>
<td>199.5</td>
<td>227.1</td>
<td>258.3</td>
<td>288.6</td>
<td>319.2</td>
<td>352.8</td>
<td>395.3</td>
<td>443.3</td>
</tr>
<tr>
<td>Difference (b)</td>
<td>(1.9)</td>
<td>(0.3)</td>
<td>(1.1)</td>
<td>(0.4)</td>
<td>(3.8)</td>
<td>(6.3)</td>
<td>(4.7)</td>
<td>(1.0)</td>
<td>(0.5)</td>
<td>3.9</td>
<td>8.6</td>
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</tr>
<tr>
<td>Cum. Actual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Difference (b/a)</td>
<td>-4%</td>
<td>0%</td>
<td>-1%</td>
<td>0%</td>
<td>-2%</td>
<td>-3%</td>
<td>-2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Fiscal Year 2013 Cumulative Water Sales (in Millions $)

<table>
<thead>
<tr>
<th>Months</th>
<th>Jul-12</th>
<th>Aug-12</th>
<th>Sep-12</th>
<th>Oct-12</th>
<th>Nov-12</th>
<th>Dec-12</th>
<th>Jan-12</th>
<th>Feb-12</th>
<th>Mar-12</th>
<th>Apr-12</th>
<th>May-12</th>
<th>Jun-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Budget (a)</td>
<td>53.2</td>
<td>106.3</td>
<td>155.3</td>
<td>198.7</td>
<td>234.8</td>
<td>268.5</td>
<td>303.4</td>
<td>334.1</td>
<td>368.5</td>
<td>409.8</td>
<td>456.0</td>
<td>509.1</td>
</tr>
<tr>
<td>Actual</td>
<td>47.0</td>
<td>98.4</td>
<td>149.5</td>
<td>193.9</td>
<td>234.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Difference (b)</td>
<td>(6.2)</td>
<td>(7.9)</td>
<td>(5.8)</td>
<td>(4.8)</td>
<td>(0.1)</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cum. Actual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Difference (b/a)</td>
<td>-12%</td>
<td>-7%</td>
<td>-4%</td>
<td>-2%</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FY12</th>
<th>FY13 through Nov-12</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>434.7</td>
<td>234.8</td>
<td>669.5</td>
</tr>
<tr>
<td>Actual</td>
<td>443.3</td>
<td>234.7</td>
<td>678.0</td>
</tr>
<tr>
<td>Difference</td>
<td>8.6</td>
<td>(0.1)</td>
<td>8.5</td>
</tr>
<tr>
<td>% Difference</td>
<td>2%</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>
*Budgeted amounts are based on the adopted two year budget, and do not reflect any projected revisions that may have previously been communicated to the Board.

**Fiscal Year 2012 Cumulative Cost of Water Purchases and Treatment (in Millions $)**

<table>
<thead>
<tr>
<th>Months</th>
<th>Jul-12</th>
<th>Aug-12</th>
<th>Sep-12</th>
<th>Oct-12</th>
<th>Nov-12</th>
<th>Dec-12</th>
<th>Jan-12</th>
<th>Feb-12</th>
<th>Mar-12</th>
<th>Apr-12</th>
<th>May-12</th>
<th>Jun-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget (a)</td>
<td>33.8</td>
<td>67.6</td>
<td>98.5</td>
<td>125.7</td>
<td>147.9</td>
<td>168.4</td>
<td>188.4</td>
<td>205.6</td>
<td>225.3</td>
<td>249.3</td>
<td>276.5</td>
<td>308.2</td>
</tr>
<tr>
<td>Actual</td>
<td>31.7</td>
<td>63.4</td>
<td>91.0</td>
<td>120.5</td>
<td>141.3</td>
<td>161.0</td>
<td>180.8</td>
<td>199.4</td>
<td>221.1</td>
<td>242.7</td>
<td>272.7</td>
<td>312.4</td>
</tr>
<tr>
<td>Difference (b)</td>
<td>(2.1)</td>
<td>(4.2)</td>
<td>(7.5)</td>
<td>(6.2)</td>
<td>(6.6)</td>
<td>(7.4)</td>
<td>(7.6)</td>
<td>(6.2)</td>
<td>(4.2)</td>
<td>(6.6)</td>
<td>(3.8)</td>
<td>4.2</td>
</tr>
<tr>
<td>Cum. Actual</td>
<td>39.0</td>
<td>77.9</td>
<td>113.6</td>
<td>144.9</td>
<td>170.4</td>
<td>193.8</td>
<td>217.4</td>
<td>237.7</td>
<td>260.8</td>
<td>289.2</td>
<td>312.2</td>
<td>358.6</td>
</tr>
<tr>
<td>% Difference (b/a)</td>
<td>-6%</td>
<td>-6%</td>
<td>-8%</td>
<td>-4%</td>
<td>-4%</td>
<td>-4%</td>
<td>-4%</td>
<td>-3%</td>
<td>-2%</td>
<td>-3%</td>
<td>-1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Fiscal Year 2013 Cumulative Cost of Water Purchases and Treatment (in Millions $)**

<table>
<thead>
<tr>
<th>Months</th>
<th>Jul-12</th>
<th>Aug-12</th>
<th>Sep-12</th>
<th>Oct-12</th>
<th>Nov-12</th>
<th>Dec-12</th>
<th>Jan-12</th>
<th>Feb-12</th>
<th>Mar-13</th>
<th>Apr-13</th>
<th>May-13</th>
<th>Jun-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget (a)</td>
<td>39.0</td>
<td>77.9</td>
<td>113.6</td>
<td>144.9</td>
<td>170.4</td>
<td>193.8</td>
<td>217.4</td>
<td>237.7</td>
<td>260.8</td>
<td>289.2</td>
<td>312.2</td>
<td>358.6</td>
</tr>
<tr>
<td>Actual</td>
<td>31.8</td>
<td>68.4</td>
<td>105.2</td>
<td>136.1</td>
<td>166.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Difference (b)</td>
<td>(7.2)</td>
<td>(9.5)</td>
<td>(8.4)</td>
<td>(8.8)</td>
<td>(4.4)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cum. Actual</td>
<td>39.6</td>
<td>77.9</td>
<td>113.6</td>
<td>144.9</td>
<td>170.4</td>
<td>193.8</td>
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<td>237.7</td>
<td>260.8</td>
<td>289.2</td>
<td>312.2</td>
<td>358.6</td>
</tr>
<tr>
<td>% Difference (b/a)</td>
<td>-18%</td>
<td>-12%</td>
<td>-7%</td>
<td>-6%</td>
<td>-3%</td>
<td>-3%</td>
<td>-3%</td>
<td>-3%</td>
<td>-3%</td>
<td>-3%</td>
<td>-3%</td>
<td>-3%</td>
</tr>
</tbody>
</table>

**Budgeted amounts are based on the adopted two year budget, and do not reflect any projected revisions that may have previously been communicated to the Board.**
San Diego County Water Authority  
Fiscal Years 2012 and 2013 Budget Status Report  
For the 17 Months Ended November 30, 2012

\[
[A] = [A \times 0.71]  
\]

<table>
<thead>
<tr>
<th></th>
<th>FY 12 &amp; 13 Amended Budget</th>
<th>FY 12 &amp; 13 17 Months (71%) Period-to-Date</th>
<th>FY 12 &amp; 13 Actual</th>
<th>Variance with Amended Budget</th>
<th>Variance with Amended Budget Positive (Negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Water Sales Revenue</td>
<td>$943,801,989</td>
<td>$669,506,702 (b)</td>
<td>$677,998,348</td>
<td>$8,491,646</td>
<td>72%</td>
</tr>
<tr>
<td>Water Purchases &amp; Treatment</td>
<td>666,868,062</td>
<td>478,644,789 (b)</td>
<td>478,402,238</td>
<td>242,551</td>
<td>72%</td>
</tr>
<tr>
<td>Total Net Water Sales Revenue</td>
<td>276,933,927</td>
<td>190,861,913 (a)</td>
<td>199,596,110</td>
<td>8,734,197</td>
<td>72%</td>
</tr>
</tbody>
</table>

Revenues and Other Income

<table>
<thead>
<tr>
<th></th>
<th>FY 12 &amp; 13 Amended Budget</th>
<th>FY 12 &amp; 13 17 Months (71%) Period-to-Date</th>
<th>FY 12 &amp; 13 Actual</th>
<th>Variance with Amended Budget</th>
<th>Variance with Amended Budget Positive (Negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Sales</td>
<td>$943,801,989</td>
<td>$669,506,702 (b)</td>
<td>$677,998,348</td>
<td>$8,491,646</td>
<td>72%</td>
</tr>
<tr>
<td>Water Purchases &amp; Treatment</td>
<td>666,868,062</td>
<td>478,644,789 (b)</td>
<td>478,402,238</td>
<td>242,551</td>
<td>72%</td>
</tr>
<tr>
<td>Total Net Water Sales Revenue</td>
<td>276,933,927</td>
<td>190,861,913 (a)</td>
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<td>8,734,197</td>
<td>72%</td>
</tr>
</tbody>
</table>

Revenues and Other Income

<table>
<thead>
<tr>
<th></th>
<th>FY 12 &amp; 13 Amended Budget</th>
<th>FY 12 &amp; 13 17 Months (71%) Period-to-Date</th>
<th>FY 12 &amp; 13 Actual</th>
<th>Variance with Amended Budget</th>
<th>Variance with Amended Budget Positive (Negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Access Charges</td>
<td>56,978,000</td>
<td>40,454,380</td>
<td>39,508,256</td>
<td>(946,124)</td>
<td>69%</td>
</tr>
<tr>
<td>Property Taxes and In-Lieu Charges</td>
<td>21,077,900</td>
<td>11,725,624 (o)</td>
<td>11,744,901</td>
<td>19,277</td>
<td>56%</td>
</tr>
<tr>
<td>Investment Income</td>
<td>13,002,000</td>
<td>4,231,420</td>
<td>4,177,368</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>Other Income</td>
<td>43,609,030</td>
<td>30,962,411</td>
<td>22,169,306</td>
<td>(8,793,105)</td>
<td>51%</td>
</tr>
</tbody>
</table>
| Capital Contributions:  
  Capacity Charges | 21,365,000 | 16,556,033 (o) | 16,556,594 | 2,109,561 | 87% |
|  Water Standby Availability Charges | 22,233,000 | 11,786,229 (o) | 11,824,901 | 42,214 | 53% |
|  Contributions in Aid of CIP | 8,220,000 | 5,836,200 | 11,429,374 | 5,593,174 | 139% |
| Total Revenues and Other Income | 188,284,930 | 127,830,297 | 123,370,795 | (4,459,502) | 66% |

Operating Departments Detail (see Attachment E)

<table>
<thead>
<tr>
<th></th>
<th>FY 12 &amp; 13 Amended Budget</th>
<th>FY 12 &amp; 13 17 Months (71%) Period-to-Date</th>
<th>FY 12 &amp; 13 Actual</th>
<th>Variance with Amended Budget</th>
<th>Variance with Amended Budget Positive (Negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Services</td>
<td>$11,311,834</td>
<td>$8,031,402</td>
<td>$7,761,240</td>
<td>$250,162</td>
<td>69%</td>
</tr>
<tr>
<td>Colorado River Program</td>
<td>2,605,091</td>
<td>1,849,615</td>
<td>1,648,521</td>
<td>201,094</td>
<td>63%</td>
</tr>
<tr>
<td>Engineering</td>
<td>6,842,582</td>
<td>4,888,233</td>
<td>4,300,509</td>
<td>557,724</td>
<td>63%</td>
</tr>
<tr>
<td>Finance</td>
<td>4,442,763</td>
<td>3,154,362</td>
<td>2,758,837</td>
<td>395,525</td>
<td>62%</td>
</tr>
<tr>
<td>General Counsel</td>
<td>6,132,033</td>
<td>4,353,743</td>
<td>4,641,188</td>
<td>(287,445)</td>
<td>76%</td>
</tr>
<tr>
<td>General Manager &amp; Board of Directors</td>
<td>5,057,977</td>
<td>3,591,164</td>
<td>2,992,388</td>
<td>598,776</td>
<td>59%</td>
</tr>
<tr>
<td>Human Resources</td>
<td>2,708,720</td>
<td>1,923,191</td>
<td>1,352,693</td>
<td>570,498</td>
<td>50%</td>
</tr>
<tr>
<td>MWD Program</td>
<td>3,424,664</td>
<td>2,431,511</td>
<td>2,103,687</td>
<td>327,824</td>
<td>61%</td>
</tr>
<tr>
<td>Operations &amp; Maintenance</td>
<td>30,128,118</td>
<td>21,390,964</td>
<td>18,247,958</td>
<td>3,143,006</td>
<td>61%</td>
</tr>
<tr>
<td>Public Outreach and Conservation</td>
<td>7,717,929</td>
<td>5,479,730</td>
<td>4,331,513</td>
<td>1,148,217</td>
<td>56%</td>
</tr>
<tr>
<td>Water Resources</td>
<td>7,343,747</td>
<td>5,214,060</td>
<td>4,829,721</td>
<td>384,339</td>
<td>66%</td>
</tr>
<tr>
<td>Total Operating Departments</td>
<td>$87,715,458</td>
<td>$62,277,975</td>
<td>$54,988,255</td>
<td>$7,289,720</td>
<td>63%</td>
</tr>
</tbody>
</table>
Notes to the Budget Status Report:

a) Period-to-date budgeted amounts are 17/24ths (71%) of fiscal years 2012 and 2013 amended budget unless noted.
b) Water sales and water purchases period-to-date budgeted amounts are based on projected acre-feet calculated per month.
c) Property taxes are primarily received in December and April. In-lieu charges in the amount of $410,490 for fiscal year 2012 and $398,288 for fiscal year 2013 are received quarterly from the City of San Diego.
d) Investment income excludes unrealized gains or losses, which are non-cash transactions.
e) Hydroelectric revenue budget amount includes only Rancho Penasquitos Pressure Control and Hydroelectric Facility (Rancho Hydro); actual amount includes Rancho Hydro and Lake Hodges Pumped Storage Facility (Hodges Hydro). Power generating from both locations are sold to SDG&E.
f) Other income includes Build America Bonds (BABs) federal subsidies, grants and other miscellaneous revenues.
g) Capacity charges are received quarterly in July, October, January and April.
h) Water standby availability charges are primarily received in January and May.
i) Contributions in aid of capital assets include planned reimbursements for the Lake Hodges Pump Station, Twin Oaks Regulatory Storage, Carlsbad Desalination Aqueduct Improvements, and Coachella Canal Lining.
j) Debt Service for Bonds and Certificates of Participation includes interest payments due semi-annually on November 1 and May 1 and principal payments due annually on May 1. Subordinate Lien Water Revenue Refunding Bonds, Series 2011S-1 due July 1 and January 1. Debt Service includes principal, interest expense, and debt service fees. Amortization expense relating to long-term debt, such as discounts, premiums, deferred loss on refunding, and cost of issuance, are excluded because they are non-cash transactions.
k) The QSA mitigation payments includes: QSA JPA contributions of $3,084,803 in December 2011 and $3,496,247 in December 2012; IID Socioeconomic Mitigation Settlement payments of $2,940,000 in June 2012 and $2,940,000 in June 2013.
l) Other expenditures include IRWM grants and other miscellaneous expenditures.
m) Amounts include capital equipment purchases.
n) The current Capital Improvement Program 2 year appropriation and life budget increased for: 1) the Carlsbad Desalination Project by $2,783,904 and 2) the 2012 Regional Water Facilities Optimization and Master Plan Update by $410,000.
o) Period-to-date budgeted amounts adjusted based on items occurring on a periodic basis.
San Diego County Water Authority
Comparison of Adopted Budget and Period-to-Date Budget (71% Overall)
to Actual Operating Expenditures by Departments
For the 17 Months Ended November 30, 2012

Actual Operating Expenditures to Adopted Budget in Percentages (%)
San Diego County Water Authority  
Schedule of Cash and Investments  
As of November 30, and October 31, 2012

<table>
<thead>
<tr>
<th></th>
<th>November</th>
<th>October</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Fund</td>
<td>$95,649,169</td>
<td>$130,780,690</td>
<td>$67,000,000</td>
</tr>
<tr>
<td>Stored Water Fund</td>
<td>57,924,378</td>
<td>57,923,688</td>
<td></td>
</tr>
<tr>
<td>Equipment Replacement Fund</td>
<td>8,139,435</td>
<td>8,336,107</td>
<td></td>
</tr>
<tr>
<td>Rate Stabilization Fund</td>
<td>51,106,995</td>
<td>51,106,322</td>
<td>55,100,000</td>
</tr>
<tr>
<td>Total Unrestricted Funds</td>
<td>31% 212,819,977</td>
<td>248,146,807</td>
<td></td>
</tr>
<tr>
<td>Pay As You Go Fund</td>
<td>142,461,969</td>
<td>142,308,003</td>
<td></td>
</tr>
<tr>
<td>CIP/Bond Construction Funds</td>
<td>257,603,045</td>
<td>264,887,282</td>
<td></td>
</tr>
<tr>
<td>Debt Service Reserve Funds</td>
<td>69,577,298</td>
<td>69,589,346</td>
<td></td>
</tr>
<tr>
<td>Total Restricted Funds</td>
<td>69% 469,642,312</td>
<td>476,784,631</td>
<td></td>
</tr>
<tr>
<td>Total Cash and Investments</td>
<td>$682,462,289</td>
<td>$724,931,438</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

(1) Total Unrestricted Funds and the Pay As You Go Fund represent the Pooled Funds in the Treasurer's Report.

(2) The Operating Fund target/maximum balance is set to equal 45-days of operating expenditures.

(3) In 2006, the Board adopted a policy governing the Rate Stabilization Fund (RSF). The policy created a target and a maximum RSF balance. The target balance is set equal to the negative financial impact of 2.5 years of extremely wet weather and the RSF maximum balance is set equal to the negative financial impact of 3.5 years of extremely wet weather. Wet weather adversely impacts the Water Authority by reducing water sales and net water sales revenue. The balance in this fund represents approximately 93% of the targeted value.
BOARD CALENDAR

FEBRUARY 2013

- 6 MWD Delegates – 11:00 a.m.
- 14 No Special Board meeting this month
  (please remove the hold from your calendars)
- 28 Regular Board meeting – 3:00 p.m.

MARCH 2013

- 6 MWD Delegates – 11:00 a.m.
- 8 SCOOP – 9:30 a.m.
- 14 Special meeting of the Water Planning Committee, Master Plan update – 1:30 p.m.
- 28 Regular Board meeting – 3:00 p.m.

APRIL 2013

- 3 MWD Delegates – 11:00 a.m.
- 11 Tentative Special Board meeting – 1:30 p.m.
- 25 Regular Board meeting – 3:00 p.m.
WATER PLANNING COMMITTEE

AGENDA FOR

JANUARY 24, 2013

Mark Weston – Chair       Jim Madaffer
Farrah Douglas – Vice Chair Marty Miller
Mark Watton – Vice Chair  Dennis Sanford
Brian Boyle               Javier Saunders
Brian Brady               Elsa Saxod
Mitch Dion                John Simpson
John Linden               Fern Steiner

1. Roll call – determination of quorum.

2. Additions to agenda (Government Code Section 54954.2(b)).

3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

4. Chair’s report.
   4-A Directors’ comments.

I. CONSENT CALENDAR

II. ACTION/DISCUSSION

1. PUBLIC HEARING: Pipeline 3 Relining Project: Sweetwater to Lower Otay segment. Mark Tegio

2. Integrated Regional Water Management Program.
   2-A Authorize submittal of Proposition 84, Round 2, Integrated Regional Water Management Implementation Grant Application. Mark Stadler
   Staff recommendation: Adopt Resolution No. 2013-______ authorizing the General Manager to submit a Proposition 84, Round 2, Integrated Regional Water Management Implementation Grant Application. (Action)
III. INFORMATION

1. Status report and upcoming activities related to the 2012 Regional Water Facilities Optimization and Master Plan update. Dave Chamberlain

2. Water supply and demand conditions. Lesley Dobalian


IV. CLOSED SESSION

V. ADJOURNMENT

NOTE: This meeting is called as an Water Planning Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.

Doria F. Lore
Clerk of the Board
January 16, 2013

Attention: Water Planning Committee

Authorize submittal of Proposition 84, Round 2, Integrated Regional Water Management Implementation Grant Application (Action)

Staff recommendation
Adopt Resolution No. 2013-_____ authorizing the General Manager to submit a Proposition 84, Round 2, Integrated Regional Water Management (IRWM) Implementation Grant Application.

Other recommendation
The Regional Advisory Committee (RAC), the San Diego Integrated Regional Water Management Program’s official advisory panel, voted to recommend the list of projects to the Water Authority Board for grant funding.

Alternative
Do not adopt Resolution No. 2013-_____ authorizing the General Manager to submit a Proposition 84, Round 2, Integrated Regional Water Management Implementation Grant Application.

Fiscal Impact
There is no immediate fiscal impact associated with the submittal of a Proposition 84, Round 2, IRWM Implementation Grant Application.

Background
The Water Authority, the county of San Diego and the city of San Diego joined in 2005 to form a regional water management group (RWMG), which is required for the development on an IRWM planning region. The Water Authority was designated the lead agency for purposes of applying for grants, administering grant funding and representing the RWMG to funding agencies. The RWMG completed the first San Diego IRWM Plan, which was adopted by the Board in 2007 and approved by the Department of Water Resources (DWR) in 2009.

To date, DWR has awarded three IRWM grants totaling $33.9 million to the San Diego IRWM Planning Region. The first grant came in 2008 as part of the Proposition 50 program. It is supporting 19 water-related projects developed by public agencies and non-profit organizations in the San Diego region, including three by the Water Authority and nine by Water Authority member agencies. Four of the projects have been completed.

The existing IRWM grant program was created after the voters approved Proposition 84 in 2006. Proposition 84 created a $1 billion fund to support IRWM planning and implementation in California. The ballot measure allocated specific amounts of money to each of 11 defined “funding
areas.” The San Diego Funding Area, which comprises the planning regions for San Diego, South Orange County and the Upper Santa Margarita River Watershed, was allotted $91 million, from which DWR subtracted $7.7 million off the top for program administration costs. In 2009, the three planning regions in the funding area adopted a Tri-County memorandum of understanding (MOU) that aims to improve planning across regional boundaries and facilitates the allocation of Proposition 84 funding for IRWM projects. The MOU establishes that the San Diego region will receive approximately 78 percent of Proposition 84 IRWM funding.

In 2011, the San Diego Region received two grants under the Proposition 84 grant program. One was a planning grant of $1 million, which the RWMG is using to support the update of the San Diego IRWM Plan so that it complies with new state guidelines and requirements. The updated IRWM Plan will be submitted to the Board for review and approval in October 2013.

Also in 2011, the DWR awarded a $7.9 million implementation grant to the San Diego Region. The funds will be used to support implementation of 11 multi-benefit projects developed by public agencies and non-profit organizations, including two by the Water Authority and two by Water Authority member agencies. The projects are located throughout the region. Of the total requested grant amount, almost $5 million is designated for five projects that will increase the region’s water supply or protect drinking water quality, or both.

As the RWMG’s lead agency, the Water Authority administers the region’s proposition 50 and 84 grant program funding through agreements with DWR. The Water Authority is responsible for contracting with all project proponents to disburse State funding. As such, the Water Authority enters into agreements with each project proponent and ensures compliance with State requirements. Water Authority staff reviews and compiles invoices and reports for submittal to DWR, receives reimbursement from DWR and disburses funding to the project proponents. Staff also works closely with project proponents when they need to amend their projects. The three IRWM grants allocate a total of $1.017 million in State funding to the Water Authority for administrative oversight of the grants.

Previous related Board reports:

- In December 2010, the Board authorized submittal of an application for Proposition 84, Round 1, implementation funds.
- In September 2010, the Board authorized submittal of an application for Proposition 84 planning funds.
- In March 2009, the Board approved the Tri-County MOU for coordinated planning and grant applications in the San Diego Funding Area.
- In October 2007, the Board authorized submittal of an application for Proposition 50 implementation funds.

Discussion

DWR released its project selection package (PSP) and application schedule for the second round of Proposition 84 IRWM implementation grants in November and established a deadline of March 29, 2013 for submittal of applications. In anticipation of the PSP release, the San Diego RWMG already was working on its application, using the same basic process used in the two
previous rounds of implementation grant funding. The RWMG and RAC organized a workgroup of nine technical experts to review projects that were submitted by local sponsors and develop a package of projects for inclusion in the grant application. The workgroup included representatives of the Water Authority, the city of San Diego and the county of San Diego as the RWMG members, as well as six other members representing public agencies and non-profit organizations from the areas of retail water supply, water quality, natural resources and watershed protection.

After meeting five times in November, the workgroup settled on a suite of seven projects using criteria based on the San Diego IRWM Plan, direction from the RAC and DWR’s PSP. The application requests $10.3 million to support these projects. If DWR awards this entire request and the region’s entire request for a planning grant, that will leave approximately $46 million in Proposition 84 grant funds set aside for the San Diego planning region, according to the Tri-County MOU funding formula. This amount will be available to the San Diego region in future grant application rounds.

The projects in the grant application are located throughout the region, from the Santa Margarita hydrologic unit in the north to the Tijuana hydrologic unit in the south. Two of the projects provide benefits for the entire region, which means that all 11 of the region’s hydrologic units will gain if the regional package is funded as proposed. All of the projects are designed to provide multiple benefits. The projects will assist the Water Authority in achieving four of the water supply goals established in the 2010 Urban Water Management Plan: conservation, recycled water, local surface water and groundwater. Of the requested $10.3 million grant amount, about $8.5 million is designated for five projects that will increase the region’s water supply or protect drinking water quality, or both. (A list of the projects, including brief descriptions, and a map of the projects are attached.)

Seven project sponsors are represented in the grant application. The Water Authority is sponsoring one project, a regional program that will promote outdoor water use efficiency in the residential and commercial sectors and offer water use audits and incentives to agricultural customers to retrofit on-site potable irrigation systems. The Water Authority’s partners in this project are the City of San Diego and Mission Resource Conservation District. The project will receive $538,000 if the grant application is fully funded.

The Olivenhain Municipal Water District is sponsoring a project that includes a suite of improvements designed to consolidate recycled water systems in the North County. It is the second phase of the project; the first phase was funded in the Proposition 84, Round 1, implementation grant. Olivenhain has nine partners, most of which also are Water Authority member agencies: Carlsbad Municipal Water District, City of Escondido, Leucadia Wastewater District, City of Oceanside, Rincon del Diablo Municipal Water District, San Elijo Joint Powers Authority, Santa Fe Irrigation District, Vallecitos Water District and Vista Irrigation District. The project will receive $3.4 million if the grant application is fully funded and is expected to increase recycled water use by approximately 6,800 acre-feet per year.
Water Planning Committee
January 16, 2013
Page 4 of 5

Another project, sponsored by the WateReuse Research Foundation in partnership with the city of San Diego, Helix Water District and Padre Dam Municipal Water District, is located at the city of San Diego’s Advanced Water Purification Demonstration Facility. The project will provide comprehensive testing, evaluation and demonstration of failsafe treatment trains for potable reuse without environmental buffers. It will convene a panel of national and international health, treatment and water quality experts to establish an appropriate framework for demonstration of failsafe potable reuse. The project is expected to provide adequate information to allow the State Department of Public Health to determine the acceptability of direct potable reuse through raw water augmentation and will benefit several of the Water Authority’s member agencies. The project will receive $2.1 million if the grant application is fully funded.

The other project proponents in the grant package are the county of San Diego, the Jacobs Center for Neighborhood Innovation, the Rural Communities Assistance Corporation and the San Diego River Park Foundation.

The grant package will allocate $309,000 – three percent of the total – to fund the Water Authority’s costs associated with administration of the grant. This will bring the total grant funding for administration of the region’s four IRWM grants to $1,326,000 and is expected to be adequate to ensure proper oversight of the contractual requirements associated with the grant.

DWR requires a minimum local funding match of 25 percent of the total cost of the projects included in the grant application. The individual project sponsors must provide this match; as such, if awarded, the Water Authority will provide matching funds for its Turf Replacement and Agricultural Irrigation Efficiency Project. The projected local funding match for the project is $179,000, which will come from the Public Outreach and Conservation Department budget.

DWR plans to announce its initial list of recommended grant recipients in August 2013. After receiving and responding to public comments on the draft list, it will release its final grant award list approximately two months later. If the San Diego Region’s application is selected for funding, the Water Authority will enter into an agreement with DWR for the grant funding.

At its December 5, 2012 meeting, the Regional Advisory Committee voted unanimously to recommend the list of projects for grant funding. Staff recommends that the Board authorize the General Manager to submit the region’s Proposition 84 IRWM implementation grant application. (A resolution concerning authorization to submit the grant application is attached.)

Prepared by: Mark Stadler, Principal Water Resources Specialist
Reviewed by: Ken Weinberg, Director of Water Resources
Approved by: Sandra L. Kerl, Deputy General Manager

Attachments:

1. Resolution No. 2013—— of the Board of Directors of the San Diego County Water Authority authorizing the General Manager to submit a Proposition 84, Round 2, IRWM implementation grant application
2. San Diego Integrated Regional Water Management Program Recommended Proposition 84, Round 2 Grant Project List
3. Map of San Diego IRWM Region and proposed Prop 84, Round 2, projects
WHEREAS, Proposition 84, the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Public Resources Code section 75001 et seq.), authorized the California Legislature to appropriate $1 billion to encourage integrated regional water management planning in California; and

WHEREAS, Section 83002(b)(3)(A)(i) of the California Water Code appropriated to the Department of Water Resources (DWR) funds for integrated regional water management (IRWM) planning grants and other purposes; and

WHEREAS, DWR has made these funds available through a grant program that allocates specific amounts of money to 11 funding areas located throughout California, including the San Diego Funding Area; and

WHEREAS, grant application procedures established by DWR require applicants to provide a copy of a resolution adopted by the applicant’s governing body designating an authorized representative to file an application for an IRWM implementation grant; and

WHEREAS, achieving IRWM grant funding will help to achieve the regional water supply goals established in the Water Authority’s 2010 Urban Water Management Plan; and

WHEREAS, the San Diego Regional Water Management Group (RWMG), in close cooperation with the Regional Advisory Committee (RAC), is preparing an application for a Proposition 84, Round 2, grant to further water supply reliability, water quality enhancement, natural resources stewardship, and water resource management in the region; and

WHEREAS, on December 5, 2012, the RAC recommended that the Water Authority Board authorize submittal of the San Diego Region’s application for a Proposition 84, Round 2, implementation grant; and

WHEREAS, the memorandum of understanding that established the San Diego IRWM Program identifies the Water Authority as the program’s authorized representative; and

WHEREAS, the Water Authority Board of Directors is the decision-making body for the Water Authority; and

WHEREAS, the Board of Directors has considered numerous reports submitted by Water Authority staff on IRWM planning.

NOW, THEREFORE, the Board of Directors of the San Diego County Water Authority resolves the following:
1. The foregoing facts are true and correct.

2. The General Manager is authorized to prepare the necessary data, conduct investigations, and submit a Proposition 84 implementation grant application.

3. The General Manager is authorized to enter into an agreement to receive a Proposition 84, Round 2, implementation grant from the California Department of Water Resources.

PASSED, APPROVED AND ADOPTED, this 24th day of January, 2013, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

____________________
Thomas V. Wornham
Chair

ATTEST:

____________________________
Michael T. Hogan
Secretary

I, Doria F. Lore, Clerk of the Board of the San Diego County Water Authority, certify that the vote shown above is correct and this Resolution No. 2013-_______ was duly adopted at the meeting of the Board of Directors on the date stated above.

___________________________
Doria F. Lore
Clerk of the Board
**San Diego Integrated Regional Water Management Program**  
**Recommended Prop 84-Round 2 Grant Project List**

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Project Sponsor</th>
<th>Functional Area</th>
<th>Project Summary</th>
<th>Recommended Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failsafe Potable Reuse at the Advanced Water Purification Demonstration Facility</td>
<td>WateReuse Research Foundation</td>
<td>Water Supply</td>
<td>This project will provide comprehensive testing, evaluation and demonstration of failsafe treatment trains for potable reuse without environmental buffers. Highlighted by a workshop on hazard analysis, critical control points, and redundancy requirements, this project will convene national and international health, treatment and water quality experts to establish an appropriate framework for demonstration of failsafe potable reuse at the City of San Diego’s demonstration facility. The WateReuse Research Foundation is actively funding nearly $3M in research to better develop potable reuse as a supplemental water supply. This project leverages the expertise from those investments and combines them to demonstrate a failsafe potable reuse train for acceptance by Department of Public Health under the SB 918 process.</td>
<td>$2,113,000</td>
</tr>
<tr>
<td>Rural Disadvantaged Community (DAC) Partnership Project – Phase II</td>
<td>Rural Community Assistance Corporation (RCAC)</td>
<td>Water Supply</td>
<td>RCAC will manage a fund that is to be disbursed to DACs for project development and construction. RCAC will assist rural DACs with project development, project oversight and access to resources, including financial resources. The DAC projects selected for Phase II funding will include both tribal and non-tribal projects such as Los Coyotes San Ysidro Water System water main replacement, La Jolla Eastern Water System water tank replacement, San Pasqual District B Water System water tank replacement) Rancho Estates MWC new well and finished water storage, Pauma Valley Water Co. new well and finished water storage, Phoenix House new well, and Descanso CWD pipeline replacement.</td>
<td>$1,887,000</td>
</tr>
<tr>
<td>North San Diego County Regional Recycled Water Project (NSDCRRWP) – Phase II</td>
<td>Olivenhain Municipal Water District</td>
<td>Water Supply – Recycled Water</td>
<td>NSDCRRWP Phase II builds on the successful partnerships established during the planning and design activities in NSDCRRWP Phase I by implementing multiple construction components of the regional recycled water supply and distribution system. Phase II includes construction of projects such as distribution pipelines, recycled water pump stations, interties between individual agency systems, and further exploration of linking the regional system. Phase II will cumulatively produce an estimated 6,805 AFY of recycled water. Phase II will involve multiple sub-projects associated with the partners included in this effort (Leucadia Wastewater District, Vallecitos Water District, Vista Irrigation District, Rincon del Diablo MWD, Olivenhain MWD, Santa Fe Irrigation District, Carlsbad MWD, City of Escondido, City of Oceanside, San Elijo JPA).</td>
<td>$3,452,000</td>
</tr>
<tr>
<td>Project Title</td>
<td>Project Sponsor</td>
<td>Functional Area</td>
<td>Project Summary</td>
<td>Recommended Grant Amount</td>
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<tr>
<td>Sustaining Healthy Tributaries to the Upper San Diego River and Protecting Local Water Supplies</td>
<td>San Diego River Park Foundation</td>
<td>Natural Resources and Watersheds</td>
<td>This project seeks to take an integrated approach to conserving healthy cold water streams through monitoring, field assessments, focused studies, on-the-ground restoration, data integration, and public education and involvement. El Capitan Reservoir is the largest local supply of water in the region. Since Boulder Creek drains into El Capitan Reservoir, any reduction of pollution reduces treatment costs. Any reduction of sedimentation reduces the resulting reduction in carrying capacity at the Reservoir. Through integration with partners and to bring a more holistic approach, the project has been expanded to include field surveys, monitoring, bio assessments, education, and stewardship components. Education elements include outreach to private land owners and 3 Indian Tribes in the area to reduce pollutant loading and better manage watershed lands.</td>
<td>$521,000</td>
</tr>
<tr>
<td>Turf Replacement and Agricultural Irrigation Efficiency Program</td>
<td>San Diego County Water Authority</td>
<td>Water Supply – Conservation</td>
<td>This regional program will promote outdoor water use efficiency in the residential and commercial sectors by providing financial incentives to replace turf grass with water-wise plant material and to upgrade overhead sprinkler irrigation systems to low-application rate/high-efficiency irrigation systems. The program will also offer incentives to agricultural customers to retrofit on-site potable irrigation systems as well as water use “audits” geared to give information and assistance to growers in their efforts to adopt techniques and methods that increase water use efficiency without jeopardizing crop productivity. All qualified retail water customers within the San Diego County Water Authority’s service area, as well as the California American Water service area of Coronado and Imperial Beach, will be eligible to participate in the program. The Water Authority is partnering with the city of San Diego and Mission Resource Conservation District to implement this project.</td>
<td>$538,000</td>
</tr>
<tr>
<td>Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II</td>
<td>County of San Diego</td>
<td>Water Quality/Stormwater</td>
<td>This project is the continuation of the Implementing Nutrient Management in the Santa Margarita River Watershed - Phase I. The project aims to continue to facilitate the Stakeholder Advisory Group (begun during Phase I), continue the core monitoring and special studies to address data gaps identified by stakeholders to achieve project objectives, and to partner with the RWQCB staff in the development of nutrient WQOs for the Santa Margarita River and Estuary.</td>
<td>$980,000</td>
</tr>
<tr>
<td>Chollas Creek Integration Project – Phase II</td>
<td>Jacobs Center for Neighborhood Innovation</td>
<td>Water Quality/Stormwater</td>
<td>The project improves water quality through: engineering modifications to slow creek flow and prevent erosion and flooding; contaminate uptake and natural filtration through restoration with native species of six acres; obtaining a streamlined process for CEQA and regional permitting that supports the on-going, long-term invasive removal and restoration; community engagement in social values research; and citizen science and water quality sampling. Phase II completes construction activities and habitat restoration delineated in Phase I at Northwest Village.</td>
<td>$500,000</td>
</tr>
<tr>
<td>Project Title</td>
<td>Project Sponsor</td>
<td>Functional Area</td>
<td>Project Summary</td>
<td>Recommended Grant Amount</td>
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<tr>
<td>Grant Administration</td>
<td>San Diego County Water Authority</td>
<td>--</td>
<td>The Water Authority will administer the grant through an agreement with DWR. The Water Authority also will enter into agreements with each project proponent to ensure compliance with State grant requirements. Water Authority staff will review and compile invoices and reports for the State and will receive funding from DWR and disburse it to project proponents</td>
<td>$309,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$10,300,000</strong></td>
</tr>
</tbody>
</table>
San Diego IRWM Region and proposed Prop 84, Round 2, projects
January 16, 2013

Attention: Water Planning Committee

Status report and upcoming activities related to the 2012 Regional Water Facilities Optimization and Master Plan Update. (Information)

Purpose
The purpose of this report is to update the board on recent and upcoming activities related to preparation of the 2012 Regional Water Facilities Optimization and Master Plan Update.

Background
Work on the 2012 Regional Water Facilities Optimization and Master Plan Update (Master Plan Update) began in 2011 following award of professional services contracts to prepare the Master Plan, the Program Environmental Impact Report (PEIR) and the Climate Action Plan (CAP). The purpose of the Master Plan Update is to develop a cost effective and reliable plan for new infrastructure capable of meeting member agency demands for untreated and treated water service through the year 2035 planning horizon. Preparation of the PEIR and CAP, in conjunction with the Master Plan Update, allows for greater flexibility to comprehensively address environmental and cumulative impacts in compliance with the California Environmental Quality Act (CEQA) and the California Global Warming Solutions Act of 2006 (AB32).

The Master Plan Update is intended to guide future Water Authority investments in new facilities. Proposed facilities identified in the Master Plan Update are being evaluated against a varied range of projected regional demands and local supply development, water resources management, water conservation, operational management, and asset management needs. These evaluations are to assure that the scope and timing for any newly proposed project is optimized with recent infrastructure investments made by the Water Authority and its member agencies. Results from the Master Plan Update will also be used to prepare the Water Authority’s proposed Capital Improvement Program (CIP) Budget.

Discussion
The Master Plan provides a comprehensive review and analysis of the Water Authority’s aqueduct system and its ability to meet future demands for the San Diego region. This review and analysis is conducted through several stages of development. These stages include:

1. Data collection, assessment of current CIP, and assessment of aqueduct system operations and capacities
2. Development and analysis of projected treated and untreated water demands
3. Development of new facility/supply alternatives
4. Evaluation of new facility/supply alternatives
5. Selection of a preferred alternative

Staff has completed the Master Plan evaluations associated with data development and analysis, as well as much of the work related to the initial development and analysis of new facility and
supply alternatives. The analyses and the development of the different alternatives allow the Master Plan to evaluate how the aqueduct system will respond under different supply and demand conditions. Additional facilities and operating strategies can be identified to increase system effectiveness. The completed work includes:

- An assessment of individual member agency treated and untreated water demands based on historical use patterns and projections for future needs consistent with the 2010 Urban Water Management Plan (UWMP). This assessment was instrumental in the evaluation of the Carlsbad Desalination Project and the determination of minimum contract purchase amounts. The assessment will also support the analysis of new facilities that may be needed to meet each member agency’s requirement for treated and untreated deliveries. The chart below shows the projected aggregate growth in treated and untreated water deliveries by the Water Authority through the 2035 planning horizon.

![Master Plan Update](image)

*Includes supplies from MWD, TOVWTP and Carlsbad Desal
**Includes supply from MWD

- Development of water supply and demand scenarios that consider further variability of local supplies, hydrologic patterns, and climate impacts. These Master Plan scenarios, shown in the table below, are consistent with the scenario planning conducted in the 2010 UWMP and have been specifically developed to assess the need and timing for new supply development and increases in conveyance and storage capacity.
### Master Plan Update
#### Supply and Demand Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Supplies and demands are consistent with the 2010 UWMP. All member agency local supply development (&quot;verifiable&quot;) and conservation targets (per SBX7-7) are achieved. A subset of the Baseline Scenario addresses climate change variation in demands.</td>
</tr>
<tr>
<td>Reduced Local Supply Development and Conservation</td>
<td>Additional member agency local supplies and conservation savings are not achieved beyond year 2010 levels. This scenario establishes the upper boundary for supply development by the Water Authority.</td>
</tr>
<tr>
<td>Enhanced Local Supply Development</td>
<td>Member agency local supply development exceeds expectations (&quot;verifiable&quot; and &quot;planned&quot;). Conservation targets, including additional savings, are achieved. This scenario establishes the lower boundary for supply development by the Water Authority.</td>
</tr>
<tr>
<td>Adjusted Local Supply Development</td>
<td>Member agency local supply development and conservation savings reach 50% of planned amounts (allows for member agency uncertainty to meet established targets). Provides an intermediate scenario to compare project timing against the baseline.</td>
</tr>
</tbody>
</table>

- Development and initial evaluation of initial alternative new facility and supply portfolios. These alternative portfolios, shown in the following table, will either (1) optimize existing infrastructure and use of regional storage, (2) increase conveyance capacity to deliver imported water supplies from the north, (3) provide new conveyance capacity to deliver imported supplies from the east, or (4) increase seawater desalination supplies. These facility portfolios will also consider impacts on new infrastructure needs related to development of the City of San Diego’s Indirect Potable Reuse project and Otay Water District’s proposed Rosarito Beach seawater desalination project. The Master Plan will also include an assessment of a strategic long-range plan for surface water storage prepared in cooperation with member agencies.

### Master Plan Update
#### Alternative Facility Portfolios

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Alternative</td>
<td>Each alternative is compared to the Baseline condition, which is comprised of the existing aqueduct system and ongoing capital projects that have been funded within the 2012/2013 CIP through completion of construction. The Baseline also includes completion of the ESP projects.</td>
</tr>
<tr>
<td>Supply from the West</td>
<td>Emphasizes increased seawater desalination supplies from the proposed Camp Pendleton Desalination Project. This alternative evaluates a new supply developed in 50 MGD increments from a plant sized from 50 to 150 MGD.</td>
</tr>
<tr>
<td>Storage Optimization</td>
<td>Emphasizes increased regional surface water storage and out of region groundwater storage banking to address peak demand constraints on the Baseline system.</td>
</tr>
<tr>
<td>Supply from the North</td>
<td>Emphasis is on continued reliance of imported supplies from MWD. New facilities include increasing conveyance capacity.</td>
</tr>
<tr>
<td>Supply from the East</td>
<td>Emphasizes the re-evaluation of a new Colorado River Conveyance system to import QSA supplies directly into the Aqueduct System at San Vicente Reservoir.</td>
</tr>
</tbody>
</table>
Next Steps
Water Authority Staff will be working with a Technical Advisory Committee (TAC) made up of Member Agency engineering staff and general managers to assist in the ongoing development, evaluation, and refinement of the facility alternatives. Evaluation metrics are being developed that will address the key ways to measure the effectiveness of the system and proposed modifications or additions. These factors include:

- Peak use conveyance constraints and overall system response
- System capacity constraints
- System reliability
- Cost of service
- Environmental impacts
- Water quality
- Supply diversification goals
- System vulnerability and system operating risks
- Energy use, renewable energy opportunities, and reduction of greenhouse gas emissions related to new infrastructure development.

Results from the Master Plan evaluations will be presented over the next several months through a series of workshops to the Board and the member agency TAC. Focused presentations will also be provided on the Camp Pendleton Seawater Desalination Project and the proposed Colorado River Conveyance Alternative.

Prepared by: Paul Gebert, Senior Water Resource Specialist
Dave Chamberlain, Principal Engineer
Reviewed by: Ken Weinberg, Director of Water Resources
January 16, 2013

Attention: Water Planning Committee

Water supply and demand conditions. (Information)

Purpose
To provide a status report on water supply and demand conditions.

Background
Hydrologic conditions improved in December on the State Water Project and the Colorado River Basin for water year 2013, which runs from October 1, 2012 through September 30, 2013.

Discussion
State Water Project
Weather conditions have been very wet in the Northern Sierra region. On December 21, 2012, the California Department of Water Resources (DWR) increased its calendar year 2013 State Water Project (SWP) Table A allocation from 30 percent to 40 percent of the State Water Contractors’ requested amounts. Last year’s final Table A allocation was 65 percent.

DWR conducted its first manual snow survey of the season on January 2, 2013. Snowpack was 134 percent of normal for the date statewide. Snow water equivalents (electronic readings) on January 15 are shown in Table 1. DWR estimates that snowpack provides about a third of the water used in California.

As of January 14, 2013, the Northern Sierra 8-Station Precipitation Index was 33.5 inches for the water year, which is 154 percent of normal for the date.

Reservoir storage also improved statewide following the early season storms in December. Table 2 shows current reservoir storage in Oroville and San Luis reservoirs.

Colorado River
Hydrologic conditions in the Upper Colorado River Basin have improved compared with last year, but are still below average. Colorado River supply conditions on January 14, 2013 are as follows:

- **Upper Colorado Basin precipitation**: 72 percent of average
- **Snowpack conditions**: 77 percent of average
- **Lake Powell unregulated inflow observed in December**: 54 percent of normal

---

Table 1. Snow Water Equivalents – 1/15/2013

<table>
<thead>
<tr>
<th>Region</th>
<th>Inches</th>
<th>% Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>16”</td>
<td>117%</td>
</tr>
<tr>
<td>Central</td>
<td>16”</td>
<td>110%</td>
</tr>
<tr>
<td>South</td>
<td>12”</td>
<td>107%</td>
</tr>
<tr>
<td>Statewide</td>
<td>15”</td>
<td>113%</td>
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</tbody>
</table>

Table 2. SWP Reservoir Storage Levels -1/14/2013

<table>
<thead>
<tr>
<th></th>
<th>San Luis</th>
<th>Oroville</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage in MAF</td>
<td>1.18</td>
<td>2.59</td>
</tr>
<tr>
<td>Percent of Capacity</td>
<td>58%</td>
<td>73%</td>
</tr>
<tr>
<td>Percent of Average</td>
<td>78%</td>
<td>113%</td>
</tr>
</tbody>
</table>
The total system contents as of January 14, 2013 are 55% of capacity, or 32.9 million acre-feet (MAF). Last year at this time, total system contents were 65% of capacity, or 38.5 MAF.

Metropolitan Water District of Southern California
The Metropolitan Water District of Southern California (MWD) reported on supply and demand conditions at its monthly Water Planning and Stewardship Committee meeting on January 7, 2013. Table 3 provides MWD’s projected supply and demand balance for calendar year 2013, assuming a 40 percent SWP Table A allocation. Under this scenario, MWD would take approximately 205,000 acre-feet (AF) out of storage. MWD projects its dry-year storage balance at the end of calendar year 2012 was approximately 2.74 MAF.

Local Supply and Demand Conditions
In San Diego County, precipitation in water year 2013 is tracking below average. Accumulated total precipitation for two stations in San Diego County is shown in Table 4.

Total local reservoir storage including the Water Authority’s carryover storage on December 31, 2012 was approximately 285,000 AF, about 55,000 AF less than this time last year. Storage levels reflect withdrawals that occurred during this period, along with increases due to runoff.

The Water Authority had the following dry-year supplies in storage through December 31, 2012:
- Water Authority local carryover storage: 12,000 AF
- Water Authority Semitropic groundwater storage bank: 16,117 AF

Figure 1 compares the Water Authority member agencies total monthly water use, excluding recycled water use, from January through December in 2011 and 2012. Cumulatively, the member agencies total potable water use in calendar year 2012 was approximately 534,000 AF, which is 24,500 AF more than in 2011.
Summary
Weather conditions have improved for water year 2013, especially on the State Water Project. Early storms boosted the State’s snowpack above average, and replenished California’s reservoirs. Conditions on the Colorado River Basin are still below average, but have improved compared with last year which was extremely dry. It is still early in the water year, and staff will continue to monitor and report on water supply conditions into the spring.

Prepared by:  Lesley Dobalian, Water Resources Specialist
Reviewed by:  Ken Weinberg, Director of Water Resources
January 16, 2013

Attention: Water Planning Committee

Water Resources Report

Purpose
This report includes the following exhibits for November and December 2012:

- Rainfall totals for the two months and water year to date
- Deliveries to Member Agencies (Exhibit A)
- Water Use by Member Agencies (Exhibit B)
- Storage Available to Member Agencies (Exhibit C)
- Firm Water Deliveries to Member Agencies (Exhibit D)
- Summary of Water Authority Member Agency Operations (Exhibit E)

### RAINFALL TOTALS (inches)

<table>
<thead>
<tr>
<th>Station</th>
<th>November 2012 / December 2012</th>
<th>2012-2013 WATER YEAR (October 2012 through September 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Normal</td>
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<tr>
<td>Lindbergh Field (N.O.A.A.)</td>
<td>0.28 / 2.19</td>
<td>1.01 / 1.53</td>
</tr>
<tr>
<td>Lake Cuyamaca (Helix W.D.)</td>
<td>1.48 / 5.90</td>
<td>3.26 / 4.89</td>
</tr>
<tr>
<td>Lake Henshaw (Vista I.D.)</td>
<td>0.82 / 4.19</td>
<td>2.21 / 3.94</td>
</tr>
</tbody>
</table>

*Accumulated through December 2012.

Sources: National Weather Service, Helix Water District, Vista Irrigation District.
### MONTHLY WATER RESOURCES REPORT

**Water Deliveries to Member Agencies**

**(acre-feet)**

#### NOVEMBER 2012

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<td>85.3</td>
<td>58.2</td>
<td>1,124.4</td>
<td>1,083.1</td>
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<td>1,403.8</td>
<td>19,987.5</td>
<td>13,110.0</td>
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<td>1,011.9</td>
<td>557.1</td>
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<td>11,399.6</td>
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<td>2,154.0</td>
<td>25,133.3</td>
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<td>3,354.8</td>
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<td>1,277.1</td>
<td>24,692.6</td>
<td>22,546.8</td>
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<td>1,529.6</td>
<td>920.2</td>
<td>20,302.2</td>
<td>18,854.5</td>
</tr>
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<td>Otay W.D.</td>
<td>2,516.4</td>
<td>1,883.7</td>
<td>31,419.5</td>
<td>30,105.5</td>
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<td>Padre Dam M.W.D.</td>
<td>891.4</td>
<td>675.6</td>
<td>11,741.1</td>
<td>11,343.3</td>
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<td>Pendleton Military Reservation</td>
<td>3.9</td>
<td>4.8</td>
<td>48.3</td>
<td>44.3</td>
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<tr>
<td>Poway, City of</td>
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<td>741.8</td>
<td>11,869.2</td>
<td>10,449.9</td>
</tr>
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<td>1,649.5</td>
<td>865.6</td>
<td>22,276.7</td>
<td>18,858.5</td>
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<td>Ramona M.W.D.</td>
<td>480.8</td>
<td>322.4</td>
<td>6,747.8</td>
<td>6,245.1</td>
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<td>501.4</td>
<td>312.0</td>
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<td>5,874.5</td>
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<td>11,704.2</td>
<td>174,344.5</td>
<td>169,209.1</td>
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<td>San Dieguito W.D.</td>
<td>161.8</td>
<td>323.9</td>
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<td>2,429.0</td>
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<tr>
<td>Santa Fe I.D.</td>
<td>432.6</td>
<td>351.9</td>
<td>5,217.9</td>
<td>4,948.6</td>
</tr>
<tr>
<td>South Bay I.D.</td>
<td>0.1</td>
<td>706.6</td>
<td>2,960.9</td>
<td>8,270.1</td>
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<tr>
<td>Vallecitos W.D.</td>
<td>1,274.5</td>
<td>913.2</td>
<td>17,103.2</td>
<td>15,621.8</td>
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<td>Valley Center M.W.D.</td>
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<td>1,050.4</td>
<td>29,341.7</td>
<td>25,627.1</td>
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<td>Vista I.D.</td>
<td>1,476.0</td>
<td>1,121.8</td>
<td>15,453.6</td>
<td>12,293.6</td>
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<td>141.5</td>
<td>2.3</td>
<td>1,692.6</td>
<td>1,239.0</td>
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</tbody>
</table>

**Deliveries To SDCWA Agencies**

<table>
<thead>
<tr>
<th>No. of Deliveries</th>
<th>November 2012</th>
<th>November 2011</th>
<th>12 Months Ended November 2012</th>
<th>12 Months Ended November 2011</th>
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</thead>
<tbody>
<tr>
<td>39,683.9</td>
<td>28,930.9</td>
<td>463,940.0</td>
<td>430,939.4</td>
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<td>Less: Deliveries to SDCWA Storage</td>
<td>388.4</td>
<td>569.8</td>
<td>6,427.5</td>
<td>6,111.0</td>
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**TOTAL MEMBER AGENCY DELIVERIES**

<table>
<thead>
<tr>
<th>No. of Deliveries</th>
<th>November 2012</th>
<th>November 2011</th>
<th>12 Months Ended November 2012</th>
<th>12 Months Ended November 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>39,295.5</td>
<td>28,361.1</td>
<td>457,512.5</td>
<td>424,828.4</td>
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</tbody>
</table>

1 November 2012 carryover storage account deliveries include 388.4 AF to San Diego accounts.

2 Deliveries from storage accounts include 460.3 AF and 495.9 AF sold to San Diego from L. Otay storage and El Capitan storage accounts, respectively.
## MONTHLY WATER RESOURCES REPORT
### Water Deliveries to Member Agencies
(aacre-feet)

**DECEMBER 2012**

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>December</th>
<th>12 Months Ended December</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2011</td>
</tr>
<tr>
<td>Carlsbad M.W.D.</td>
<td>1,094.3</td>
<td>960.0</td>
</tr>
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<td>57.6</td>
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<tr>
<td>Escondido, City of</td>
<td>1,198.0</td>
<td>869.7</td>
</tr>
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<td>430.4</td>
<td>776.4</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>4,032.5</td>
<td>2,121.4</td>
</tr>
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<td>Lakeside W.D.</td>
<td>225.9</td>
<td>212.2</td>
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<td>-</td>
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<tr>
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<td>952.2</td>
<td>1,496.8</td>
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<td>1,111.9</td>
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<td>1,983.7</td>
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<td>677.5</td>
<td>685.3</td>
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<td>284.6</td>
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<tr>
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<td>302.8</td>
</tr>
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<td>San Diego, City of</td>
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<td>9,053.0</td>
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<td>67.7</td>
<td>170.9</td>
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<tr>
<td>Yuima M.W.D.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Deliveries To SDCWA Agencies¹</strong></td>
<td>27,734.6</td>
<td>25,920.3</td>
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<tr>
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<td>285.4</td>
<td>560.9</td>
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<td><strong>TOTAL MEMBER AGENCY DELIVERIES</strong></td>
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<td>Deliveries to South Coast Water District</td>
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<tr>
<td>Deliveries From SDCWA Storage²</td>
<td>475.7</td>
<td>285.4</td>
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¹ December 2012 carryover storage account deliveries include 285.4 AF to San Diego accounts. ² Deliveries from storage accounts include 475.7 AF sold to San Diego from L. Otay storage account.
### NOVEMBER 2012

#### Imported Source

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<thead>
<tr>
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<th></th>
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<td>3.3</td>
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<td>-</td>
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<td>-</td>
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<td>74</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
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<td>580.9</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>825.6</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>40.3</td>
<td>16.1</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>284.0</td>
<td>229.6</td>
<td>785.4</td>
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<td>470.4</td>
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<td>13,076.0</td>
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<td>322.7</td>
<td>65.0</td>
<td>-</td>
<td>-</td>
<td>43.9</td>
<td>20.1</td>
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<td>33.7</td>
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<td>836.9</td>
<td>-</td>
<td>189.1</td>
<td>195.3</td>
<td>-</td>
<td>-</td>
<td>1,026.0</td>
<td>872.9</td>
</tr>
<tr>
<td>Valleicos W.D.</td>
<td>1,304.0</td>
<td>913.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,304.0</td>
<td>913.1</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>2,217.7</td>
<td>1,050.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>30.0</td>
<td>29.2</td>
<td>2,247.7</td>
<td>1,079.6</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>1,476.0</td>
<td>1,121.6</td>
<td>95.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,571.3</td>
<td>1,121.8</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>141.5</td>
<td>2.3</td>
<td>-</td>
<td>111.3</td>
<td>87.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>252.8</td>
<td>89.8</td>
</tr>
<tr>
<td><strong>TOTAL USE</strong></td>
<td>37,570.3</td>
<td>27,782.3</td>
<td>2,239.9</td>
<td>1,607.6</td>
<td>1,536.1</td>
<td>1,436.9</td>
<td>2,133.2</td>
<td>1,667.7</td>
<td>43,479.5</td>
<td>32,494.5</td>
</tr>
<tr>
<td><strong>PERCENT CHANGE</strong></td>
<td>35%</td>
<td>39%</td>
<td>7%</td>
<td>28%</td>
<td>34%</td>
<td>30%</td>
<td>32%</td>
<td>33%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. De Luz figures included in Fallbrook P.U.D. total.
2. Brackish groundwater use included in groundwater totals.
3. Pendleton's imported water use includes water delivered by South Coast Water District.
4. Poway recycled use is reported quarterly.
## MONTHLY WATER RESOURCES REPORT

**Estimated Water Use by Member Agency (acre-feet)**

### DECEMBER 2012

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>Imported Source S.D.C.W.A.</th>
<th>Surface Water</th>
<th>Local Sources</th>
<th>Reclaimed Water</th>
<th>December Totals</th>
</tr>
</thead>
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<td>Carlsbad M.W.D.</td>
<td>945.3</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
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<td>1,050.4</td>
<td>-</td>
<td>444.0</td>
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<td>414.8</td>
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<td>-</td>
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<td>2,155.5</td>
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<td>128.9</td>
<td>11.6</td>
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<tr>
<td>Lakeside W.D.</td>
<td>225.9</td>
<td>212.2</td>
<td>-</td>
<td>-</td>
<td>20.1</td>
</tr>
<tr>
<td>National City, City of ²</td>
<td>-</td>
<td>185.7</td>
<td>146.5</td>
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<td>-</td>
</tr>
<tr>
<td>Oceanside, City of ²</td>
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<td>1,496.8</td>
<td>-</td>
<td>-</td>
<td>461.3</td>
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<tr>
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<td>889.9</td>
<td>1,111.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Otay W.D.</td>
<td>1,835.5</td>
<td>1,983.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Padre Dam M.W.D.</td>
<td>699.9</td>
<td>678.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pendleton M.R.³</td>
<td>38.3</td>
<td>87.1</td>
<td>-</td>
<td>-</td>
<td>430.0</td>
</tr>
<tr>
<td>Poway, City of 4</td>
<td>526.5</td>
<td>596.5</td>
<td>16.5</td>
<td>4.0</td>
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</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>704.7</td>
<td>1,140.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>Ramona M.W.D.</td>
<td>273.0</td>
<td>318.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Rincon Del Diablo M.W.D.</td>
<td>297.2</td>
<td>302.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>San Diego, City of</td>
<td>11,219.2</td>
<td>8,247.4</td>
<td>731.4</td>
<td>4,094.9</td>
<td>64.2</td>
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<td>74.9</td>
<td>153.6</td>
<td>272.9</td>
<td>267.9</td>
<td>-</td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td>66.8</td>
<td>162.2</td>
<td>259.6</td>
<td>274.9</td>
<td>-</td>
</tr>
<tr>
<td>South Bay I.D.²</td>
<td>-</td>
<td>796.9</td>
<td>794.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vallecitos W.D.</td>
<td>803.0</td>
<td>1,052.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>874.7</td>
<td>1,490.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>1,029.2</td>
<td>569.2</td>
<td>-</td>
<td>651.0</td>
<td>-</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>34.3</td>
</tr>
<tr>
<td><strong>TOTAL USE</strong></td>
<td>25,451.1</td>
<td>25,650.3</td>
<td>2,221.2</td>
<td>5,865.6</td>
<td>1,494.9</td>
</tr>
<tr>
<td><strong>PERCENT CHANGE</strong></td>
<td>-1%</td>
<td>-62%</td>
<td>3%</td>
<td>34%</td>
<td>-</td>
</tr>
</tbody>
</table>

¹De Luz figures included in Fallbrook P.U.D. total.
²Brackish groundwater use included in groundwater totals.
³Pendleton's imported water use includes water delivered by South Coast Water District.
⁴Poway recycled use is reported quarterly.

Generated: 1/15/13 11:11 AM
## Monthly Water Resources Report:
### NOVEMBER 2012

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Reservoir</th>
<th>Capacity</th>
<th>NOVEMBER 2012 % of Capacity</th>
<th>NOVEMBER 2011 % of Capacity</th>
<th>Change During Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>Maerkle</td>
<td>600</td>
<td>314 (52%)</td>
<td>349 (58%)</td>
<td>95</td>
</tr>
<tr>
<td>Escondido, City of 1</td>
<td>Dixon</td>
<td>2,606</td>
<td>2,339 (90%)</td>
<td>2,474 (95%)</td>
<td>(74)</td>
</tr>
<tr>
<td>Wohlford</td>
<td></td>
<td>6,506</td>
<td>2,114 (32%)</td>
<td>2,114 (32%)</td>
<td>(150)</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>9,112</td>
<td>4,453 (49%)</td>
<td>4,588 (50%)</td>
<td>(224)</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>Red Mountain</td>
<td>1,335</td>
<td>561 (42%)</td>
<td>545 (41%)</td>
<td>15</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>Cuyamaca</td>
<td>8,195</td>
<td>588 (7%)</td>
<td>747 (9%)</td>
<td>(9)</td>
</tr>
<tr>
<td>Jennings</td>
<td></td>
<td>9,790</td>
<td>6,469 (66%)</td>
<td>9,049 (92%)</td>
<td>128</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>17,985</td>
<td>7,057 (39%)</td>
<td>9,796 (54%)</td>
<td>137</td>
</tr>
<tr>
<td>Poway, City of</td>
<td></td>
<td>3,330</td>
<td>3,150 (95%)</td>
<td>3,144 (94%)</td>
<td>48</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>Beck</td>
<td>625</td>
<td>130 (21%)</td>
<td>206 (33%)</td>
<td>(88)</td>
</tr>
<tr>
<td>Morro Hill</td>
<td></td>
<td>465</td>
<td>0 (0%)</td>
<td>1 (0%)</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>1,090</td>
<td>130 (12%)</td>
<td>207 (19%)</td>
<td>(88)</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td></td>
<td>12,000</td>
<td>2,655 (22%)</td>
<td>2,866 (24%)</td>
<td>(33)</td>
</tr>
<tr>
<td>San Diego, City of 2</td>
<td></td>
<td>34,806</td>
<td>18,434 (53%)</td>
<td>28,894 (83%)</td>
<td>(891)</td>
</tr>
<tr>
<td>El Capitan</td>
<td></td>
<td>112,807</td>
<td>64,076 (57%)</td>
<td>74,926 (66%)</td>
<td>(1,373)</td>
</tr>
<tr>
<td>Hodges</td>
<td></td>
<td>30,251</td>
<td>11,303 (37%)</td>
<td>24,029 (79%)</td>
<td>(169)</td>
</tr>
<tr>
<td>Lower Otay</td>
<td></td>
<td>49,849</td>
<td>34,964 (70%)</td>
<td>35,717 (72%)</td>
<td>(90)</td>
</tr>
<tr>
<td>Miramar</td>
<td></td>
<td>6,682</td>
<td>5,316 (80%)</td>
<td>5,493 (82%)</td>
<td>1,051</td>
</tr>
<tr>
<td>Morena</td>
<td></td>
<td>50,694</td>
<td>10,213 (20%)</td>
<td>12,013 (24%)</td>
<td>(402)</td>
</tr>
<tr>
<td>Murray</td>
<td></td>
<td>4,684</td>
<td>4,091 (87%)</td>
<td>4,207 (90%)</td>
<td>564</td>
</tr>
<tr>
<td>San Vicente</td>
<td></td>
<td>89,312</td>
<td>36,660 (41%)</td>
<td>37,143 (42%)</td>
<td>(21)</td>
</tr>
<tr>
<td>Sutherland</td>
<td></td>
<td>29,508</td>
<td>2,946 (10%)</td>
<td>15,201 (52%)</td>
<td>(246)</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>408,593</td>
<td>188,001 (46%)</td>
<td>237,623 (58%)</td>
<td>(1,577)</td>
</tr>
<tr>
<td>San Dieguito WD/Santa Fe ID</td>
<td></td>
<td>883</td>
<td>521 (59%)</td>
<td>515 (58%)</td>
<td>(21)</td>
</tr>
<tr>
<td>Sweetwater Authority</td>
<td></td>
<td>25,400</td>
<td>17,419 (69%)</td>
<td>25,211 (99%)</td>
<td>17</td>
</tr>
<tr>
<td>Sweetwater</td>
<td></td>
<td>28,079</td>
<td>8,663 (31%)</td>
<td>11,695 (42%)</td>
<td>(1,094)</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>53,479</td>
<td>26,082 (49%)</td>
<td>36,906 (69%)</td>
<td>(1,077)</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td></td>
<td>1,612</td>
<td>1,388 (86%)</td>
<td>1,475 (92%)</td>
<td>(88)</td>
</tr>
<tr>
<td>Vista I.D. 3</td>
<td>Henshaw</td>
<td>51,774</td>
<td>3,266 (6%)</td>
<td>7,122 (14%)</td>
<td>624</td>
</tr>
</tbody>
</table>

### Member Agency Total Water in Storage:

- **El Capitan**: 4,649 (524%
- **Hodges/Olivenhain**: 21,599 (44)
- **Lower Otay**: 5,744 (145)
- **San Vicente**: 1,994 (16)
- **Sweetwater**: 0 (9)

**Subtotal**: 33,985 (729)

**Total Water in Storage**: 561,793 (2,189)

### Other Agencies:

- **Metropolitan Water District**: Skinner 44,264 (81%)
- **State Water Project**: Oroville 3,537,600 (35,091)

**Total Other Water in Storage**: 4,381,864 (52,572)

---

1. Excludes storage allocated to Escondido Mutual Water Co. or its rights to a portion of the unallocated water in Lake Henshaw.
2. Includes reserves subject to city’s outstanding commitments to San Dieguito WD, and California American Mutual Water Co. (Cal-Am)
3. SDCWA has storage contracts in City of San Diego reservoirs in the amount of 40,000 AF, if available capacity exists.

---

**Note:**
- Excludes storage allocated to Escondido Mutual Water Co. or its rights to a portion of the unallocated water in Lake Henshaw.
- Includes reserves subject to city’s outstanding commitments to San Dieguito WD, and California American Mutual Water Co. (Cal-Am)
- SDCWA has storage contracts in City of San Diego reservoirs in the amount of 40,000 AF, if available capacity exists.

---

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### Exhibit C

#### MONTHLY WATER RESOURCES REPORT

##### Reservoir Storage

(acre-feet)

#### DECEMBER 2012

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Reservoir</th>
<th>Capacity</th>
<th>DECEMBER 2012</th>
<th>% of Capacity</th>
<th>DECEMBER 2011</th>
<th>% of Capacity</th>
<th>Change During Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>Maerkle</td>
<td>600</td>
<td>460</td>
<td>77%</td>
<td>243</td>
<td>41%</td>
<td>146</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>Dixon</td>
<td>2,606</td>
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<td>88%</td>
<td>2,319</td>
<td>89%</td>
<td>(34)</td>
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<tr>
<td></td>
<td>Wohlford</td>
<td>6,506</td>
<td>2,138</td>
<td>33%</td>
<td>2,222</td>
<td>34%</td>
<td>24</td>
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<td>4,443</td>
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<td>4,541</td>
<td>50%</td>
<td>(10)</td>
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<td>Fallbrook P.U.D.</td>
<td>Red Mountain</td>
<td>1,335</td>
<td>588</td>
<td>44%</td>
<td>588</td>
<td>44%</td>
<td>27</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>Cuyamaca</td>
<td>8,195</td>
<td>646</td>
<td>8%</td>
<td>779</td>
<td>10%</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Jennings</td>
<td>9,790</td>
<td>8,414</td>
<td>90%</td>
<td>8,977</td>
<td>92%</td>
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<td>9,756</td>
<td>54%</td>
<td>2,430</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>Beck</td>
<td>625</td>
<td>0</td>
<td>0%</td>
<td>152</td>
<td>24%</td>
<td>(130)</td>
</tr>
<tr>
<td></td>
<td>Morro Hill</td>
<td>465</td>
<td>147</td>
<td>32%</td>
<td>0</td>
<td>0%</td>
<td>147</td>
</tr>
<tr>
<td>Subtotal</td>
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<td>1,090</td>
<td>147</td>
<td>13%</td>
<td>152</td>
<td>14%</td>
<td>17</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td>Ramona</td>
<td>12,000</td>
<td>2,688</td>
<td>22%</td>
<td>2,797</td>
<td>23%</td>
<td>33</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barrett</td>
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<td>34,806</td>
<td>18,178</td>
<td>52%</td>
<td>28,536</td>
<td>82%</td>
<td>(256)</td>
</tr>
<tr>
<td>El Capitan</td>
<td></td>
<td>112,807</td>
<td>64,215</td>
<td>57%</td>
<td>74,690</td>
<td>66%</td>
<td>139</td>
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<tr>
<td>Hodges</td>
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<td>30,251</td>
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<td>35%</td>
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<td>80%</td>
<td>1,427</td>
</tr>
<tr>
<td>Lower Otay</td>
<td></td>
<td>49,849</td>
<td>34,618</td>
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<td>35,277</td>
<td>71%</td>
<td>(374)</td>
</tr>
<tr>
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<td>6,682</td>
<td>5,417</td>
<td>81%</td>
<td>5,383</td>
<td>81%</td>
<td>102</td>
</tr>
<tr>
<td>Morena</td>
<td></td>
<td>50,694</td>
<td>10,354</td>
<td>20%</td>
<td>11,987</td>
<td>24%</td>
<td>141</td>
</tr>
<tr>
<td>Murray</td>
<td></td>
<td>4,684</td>
<td>3,596</td>
<td>77%</td>
<td>4,277</td>
<td>91%</td>
<td>(495)</td>
</tr>
<tr>
<td>San Vicente</td>
<td></td>
<td>89,312</td>
<td>36,618</td>
<td>41%</td>
<td>35,384</td>
<td>40%</td>
<td>(42)</td>
</tr>
<tr>
<td>Sutherland</td>
<td></td>
<td>29,508</td>
<td>3,034</td>
<td>10%</td>
<td>14,564</td>
<td>49%</td>
<td>88</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>408,593</td>
<td>186,714</td>
<td>46%</td>
<td>234,172</td>
<td>57%</td>
<td>757</td>
</tr>
<tr>
<td>Sweetwater Authority</td>
<td>Loveland</td>
<td>25,400</td>
<td>17,463</td>
<td>69%</td>
<td>25,400</td>
<td>100%</td>
<td>44</td>
</tr>
<tr>
<td>Sweetwater</td>
<td></td>
<td>28,079</td>
<td>7,754</td>
<td>28%</td>
<td>11,912</td>
<td>42%</td>
<td>(909)</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>53,479</td>
<td>25,217</td>
<td>47%</td>
<td>37,312</td>
<td>70%</td>
<td>(865)</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>Turner</td>
<td>1,612</td>
<td>1,388</td>
<td>86%</td>
<td>1,507</td>
<td>93%</td>
<td>-</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>Henshaw</td>
<td>51,774</td>
<td>4,268</td>
<td>8%</td>
<td>6,300</td>
<td>12%</td>
<td>1,002</td>
</tr>
</tbody>
</table>

#### MEMBER AGENCY TOTAL WATER IN STORAGE

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Capacity</th>
<th>DECEMBER 2012</th>
<th>% of</th>
<th>DECEMBER 2011</th>
<th>% of</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Diego WD/Santa Fe ID</td>
<td>San Diego</td>
<td>883</td>
<td>515</td>
<td>58%</td>
<td>422</td>
<td>48%</td>
</tr>
<tr>
<td>Sweetwater Authority</td>
<td>Loveland</td>
<td>25,400</td>
<td>17,463</td>
<td>69%</td>
<td>25,400</td>
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<tr>
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<td>Vista I.D.</td>
<td>Henshaw</td>
<td>51,774</td>
<td>4,268</td>
<td>8%</td>
<td>6,300</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Member Agency Total</strong></td>
<td><strong>561,793</strong></td>
<td><strong>238,860</strong></td>
<td><strong>43%</strong></td>
<td><strong>300,730</strong></td>
<td><strong>54%</strong></td>
<td><strong>3,328</strong></td>
</tr>
</tbody>
</table>

#### SDCWA Accounts (city evap/seepage losses estimated)

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Capacity</th>
<th>DECEMBER 2012</th>
<th>% of</th>
<th>DECEMBER 2011</th>
<th>% of</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Capitan</td>
<td></td>
<td>4,624</td>
<td></td>
<td>8,209</td>
<td></td>
<td>(25)</td>
</tr>
<tr>
<td>Hodges/Olivenhain</td>
<td></td>
<td>21,842</td>
<td></td>
<td>19,198</td>
<td></td>
<td>254</td>
</tr>
<tr>
<td>Lower Otay</td>
<td></td>
<td>5,388</td>
<td></td>
<td>6,139</td>
<td></td>
<td>(357)</td>
</tr>
<tr>
<td>San Vicente</td>
<td></td>
<td>2,073</td>
<td></td>
<td>3,791</td>
<td></td>
<td>79</td>
</tr>
<tr>
<td>Sweetwater</td>
<td></td>
<td>0</td>
<td></td>
<td>3,019</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>33,927</strong></td>
<td><strong>48%</strong></td>
<td><strong>40,356</strong></td>
<td><strong>70%</strong></td>
<td><strong>(685)</strong></td>
</tr>
</tbody>
</table>

#### TOTAL WATER IN STORAGE

<table>
<thead>
<tr>
<th>Capacity</th>
<th>DECEMBER 2012</th>
<th>% of</th>
<th>DECEMBER 2011</th>
<th>% of</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>561,793</strong></td>
<td></td>
<td><strong>43%</strong></td>
<td><strong>300,730</strong></td>
<td><strong>54%</strong></td>
<td><strong>3,328</strong></td>
</tr>
</tbody>
</table>

#### OTHER AGENCIES

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Capacity</th>
<th>DECEMBER 2012</th>
<th>% of</th>
<th>DECEMBER 2011</th>
<th>% of</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan Water District</td>
<td>Skinner</td>
<td>44,264</td>
<td>38,211</td>
<td>86%</td>
<td>36,947</td>
<td>83%</td>
</tr>
<tr>
<td>Diamond Valley</td>
<td></td>
<td>800,000</td>
<td>689,802</td>
<td>86%</td>
<td>786,298</td>
<td>98%</td>
</tr>
<tr>
<td>State Water Project</td>
<td>Oroville</td>
<td>3,537,600</td>
<td>2,524,968</td>
<td>71%</td>
<td>2,545,085</td>
<td>72%</td>
</tr>
<tr>
<td><strong>Total Other Water In Storage</strong></td>
<td><strong>4,381,864</strong></td>
<td><strong>3,252,981</strong></td>
<td><strong>74%</strong></td>
<td><strong>3,368,330</strong></td>
<td><strong>77%</strong></td>
<td><strong>602,478</strong></td>
</tr>
</tbody>
</table>

1 Excludes storage allocated to Escondido Mutual Water Co. or its rights to a portion of the unallocated water in Lake Henshaw.

2 Includes reserves subject to city's outstanding commitments to San Diego WD, and California American Mutual Water Co. (Cal-Am)

SDCWA has storage contracts in City of San Diego reservoirs in the amount of 40,000 AF, if available capacity exists.

3 Includes allocated and unallocated water in Lake Henshaw.

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## MONTHLY WATER RESOURCES REPORT
### Tier 1 Estimated Deliveries to Member Agencies
(Figures in acre-feet)

**CY 2012 through November 2012**

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>CY2012 Tier 1 Threshold 1</th>
<th>CYTD Firm Deliveries 2</th>
<th>% of Tier 1 Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>18,354.7</td>
<td>15,655.7</td>
<td>85.3%</td>
</tr>
<tr>
<td>Del Mar, City of</td>
<td>1,408.3</td>
<td>1,061.4</td>
<td>75.4%</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>23,694.4</td>
<td>18,186.4</td>
<td>76.8%</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>12,569.4</td>
<td>10,435.5</td>
<td>83.0%</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>38,421.4</td>
<td>23,011.9</td>
<td>59.9%</td>
</tr>
<tr>
<td>Lakeside M.W.D.</td>
<td>4,718.2</td>
<td>3,241.5</td>
<td>68.7%</td>
</tr>
<tr>
<td>Oceanside, City of</td>
<td>28,848.1</td>
<td>23,195.8</td>
<td>80.4%</td>
</tr>
<tr>
<td>Olivenhain M.W.D.</td>
<td>19,347.5</td>
<td>19,069.9</td>
<td>98.6%</td>
</tr>
<tr>
<td>Otay W.D. (Excludes Tijuana)</td>
<td>32,173.0</td>
<td>29,435.8</td>
<td>91.5%</td>
</tr>
<tr>
<td>Pendleton M.C.B./South Coast W.D.</td>
<td>1,141.3</td>
<td>576.4</td>
<td>50.5%</td>
</tr>
<tr>
<td>Poway, City of</td>
<td>13,575.6</td>
<td>11,389.7</td>
<td>83.9%</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>23,572.1</td>
<td>17,875.7</td>
<td>75.8%</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td>8,101.1</td>
<td>4,756.2</td>
<td>58.7%</td>
</tr>
<tr>
<td>Rincon Del Diablo M.W.D.</td>
<td>7,307.0</td>
<td>5,867.0</td>
<td>80.3%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>215,438.4</td>
<td>159,318.9</td>
<td>74.0%</td>
</tr>
<tr>
<td>San Dieguito W.D.</td>
<td>4,692.0</td>
<td>1,883.8</td>
<td>40.1%</td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td>7,895.9</td>
<td>5,020.1</td>
<td>63.6%</td>
</tr>
<tr>
<td>Sweetwater Authority</td>
<td>13,094.7</td>
<td>2,808.6</td>
<td>21.4%</td>
</tr>
<tr>
<td>Vallecitos W.D.</td>
<td>14,641.2</td>
<td>15,624.0</td>
<td>106.7%</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>26,252.9</td>
<td>19,506.2</td>
<td>74.3%</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>17,576.3</td>
<td>14,843.4</td>
<td>84.5%</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>94.0</td>
<td>96.6</td>
<td>102.8%</td>
</tr>
</tbody>
</table>

**MEMBER AGENCY TOTALS**

|                  | 547,239.0                | 413,407.1              | 75.5%                 |

Less: QSA deliveries calendar year to date

|                  | (153,725.0)              |

**Deliveries to CWA storage year to date**

|                  | 5,873.0                  |

**Deliveries from CWA storage year to date**

|                  | (9,650.0)                |

**Estimated Tier 1 deliveries calendar year to date**

|                  | 255,905.1                | 46.8%                 |

---

1. Tier 1 threshold is equal to all firm deliveries up to 90% of a member agency's historic maximum year firm demand.
2. Firm deliveries are net of IAWP certifications received.
3. Includes forced deliveries and deliveries made through temporary carryover storage agreements.
4. Includes sales from Water Authority storage accounts.
## Tier 1 Estimated Deliveries to Member Agencies

(Figures in acre-feet)

### Calendar Year 2012

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>CY2012 Tier 1 Threshold</th>
<th>CYTD Firm Deliveries</th>
<th>% of Tier 1 Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>18,354.7</td>
<td>16,750.0</td>
<td>91.3%</td>
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<tr>
<td>Del Mar, City of</td>
<td>1,408.3</td>
<td>1,119.0</td>
<td>79.5%</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>23,694.4</td>
<td>19,261.4</td>
<td>81.3%</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>12,569.4</td>
<td>10,810.6</td>
<td>86.0%</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>38,421.4</td>
<td>27,044.4</td>
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<tr>
<td>Lakeside M.W.D.</td>
<td>4,718.2</td>
<td>3,467.4</td>
<td>73.5%</td>
</tr>
<tr>
<td>Oceanside, City of</td>
<td>28,848.1</td>
<td>24,148.0</td>
<td>83.7%</td>
</tr>
<tr>
<td>Olivenhain M.W.D.</td>
<td>19,347.5</td>
<td>19,954.2</td>
<td>103.1%</td>
</tr>
<tr>
<td>Otay W.D. (Excludes Tijuana)</td>
<td>32,173.0</td>
<td>31,271.3</td>
<td>97.2%</td>
</tr>
<tr>
<td>Padre Dam M.W.D.</td>
<td>14,321.5</td>
<td>11,224.1</td>
<td>78.4%</td>
</tr>
<tr>
<td>Pendleton M.C.B./South Coast W.D.</td>
<td>1,141.3</td>
<td>614.7</td>
<td>53.9%</td>
</tr>
<tr>
<td>Poway, City of</td>
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<td>11,729.9</td>
<td>86.4%</td>
</tr>
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<td>23,572.1</td>
<td>18,524.5</td>
<td>78.6%</td>
</tr>
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<td>8,101.1</td>
<td>5,000.5</td>
<td>61.7%</td>
</tr>
<tr>
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<td>170,772.3</td>
<td>79.3%</td>
</tr>
<tr>
<td>San Dieguito W.D.</td>
<td>4,692.0</td>
<td>1,958.7</td>
<td>41.7%</td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td>7,895.9</td>
<td>5,087.5</td>
<td>64.4%</td>
</tr>
<tr>
<td>Sweetwater Authority</td>
<td>13,094.7</td>
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<td>26,252.9</td>
<td>20,134.1</td>
<td>76.7%</td>
</tr>
<tr>
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<td>17,576.3</td>
<td>15,868.1</td>
<td>90.3%</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>94.0</td>
<td>96.6</td>
<td>102.8%</td>
</tr>
</tbody>
</table>

**MEMBER AGENCY TOTALS**

|                                                            | 547,239.0               | 440,164.7            | 80.4%                 |

Less: QSA deliveries calendar year to date (165,175.0)

Deliveries to CWA storage year to date 3 6,158.4

Deliveries from CWA storage year to date 4 (12,563.4)

**Estimated Tier 1 deliveries calendar year to date**

|                                                            | 268,584.7               | 49.1%                 |

---

1 Tier 1 threshold is equal to all firm deliveries up to 90% of a member agency’s historic maximum year firm demand.

2 Firm deliveries are net of IAWP certifications received.

3 Includes forced deliveries and deliveries made through temporary carryover storage agreements.

4 Includes sales from Water Authority storage accounts.
MONTHLY WATER RESOURCES REPORT
Summary of Water Authority Member Agency Operations

NOVEMBER 2012

Member Agency Deliveries (AF)

Member Agency Water Use

Member Agency Storage (AF)

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MONTHLY WATER RESOURCES REPORT
Summary of Water Authority Member Agency Operations

DECEMBER 2012

Member Agency Deliveries (AF)

<table>
<thead>
<tr>
<th>December</th>
<th>Previous 12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2011</td>
</tr>
<tr>
<td>27,449</td>
<td>25,359</td>
</tr>
<tr>
<td>459,602</td>
<td>422,807</td>
</tr>
</tbody>
</table>

Member Agency Water Use

- **Imported**: 84%
- **Surface**: 7%
- **Well & Brackish Recovery**: 5%
- **Recycled**: 4%

DECEMBER 2012

- **Imported**: 84%
- **Surface**: 7%
- **Well & Brackish Recovery**: 5%
- **Recycled**: 4%

Previous 12 Months

- **Imported**: 82%
- **Surface**: 11%
- **Well & Brackish Recovery**: 5%
- **Recycled**: 4%

Member Agency Storage (AF)

- **December**
  - 2012: 238,860
  - 2011: 300,730

- **12 Month Average**
  - 2012: 270,180
  - 2011: 322,081

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IMPORTED WATER COMMITTEE

AGENDA FOR

JANUARY 24, 2013

Elsa Saxod – Chair     Keith Lewinger
Dennis Lamb – Vice Chair    John Linden
Ken Williams – Vice Chair    Mark Muir
Gary Arant    Bud Pocklington
Gary Croucher    Hershell Price
Michael Hogan    Fern Steiner
Bill Knutson    Doug Wilson
Tom Wornham

1. Roll call – determination of quorum.

2. Additions to agenda (Government Code Section 54954.2(b)).

3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

4. Chair’s report.
   4-A Directors’ comments.

I. CONSENT CALENDAR

II. ACTION/DISCUSSION

1. Metropolitan Water District Issues and Activities update.  
   1-A Metropolitan Water District Delegates report. (Information) (supplemental materials) MWD Delegates

2. Bay Delta update.  
   2-A Bay Delta update. (Information) Dennis Cushman

   2-B Presentation on Portfolio Approach to Bay-Delta Conservation Plan. (Information) Dennis Cushman
III. INFORMATION

2. Metropolitan Water District Program report. Amy Chen
3. Status of Purchase Order Extension with Metropolitan Water District. Amy Chen

IV. CLOSED SESSION

1. CLOSED SESSIONS: Dan Hentschke
   Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(a)
   Name of Case: QSA Judicial Council Coordination
   Proceeding No. 4353
   Conference with Legal Counsel - Existing Litigation
   Government Code §54956.9(a)
   Name of Case: State Water Resources Control Board (SWRCB)
   Imperial Irrigation District and San Diego County Water Authority
   Joint Petition for Modification of Revised Order WRO 2002-0013
   (Permit 7643, Application 7482)

2. CLOSED SESSION: Dan Hentschke
   Conference with Legal Counsel - Existing Litigation
   Government Code §54956.9(a)
   SDCWA v Metropolitan Water District of Southern California;
   Case Nos. CPF-10-510830 and CPF-12-512466

V. ADJOURNMENT

Doria F. Lore
Clerk of the Board

NOTE: This meeting is called as an Imported Water Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.
January 16, 2013

Attention: Imported Water Committee

Southern California’s Water Supply Projects (Information)

Purpose
This report discusses the local water resources and conservation programs under way, and being planned by Metropolitan Water Districts’ member agencies, as well as their potential impact on the region’s dependence on imported water supplies.

Background
In 2010, the Water Authority commissioned a study by Gordon Hess and Associates, Inc. (GHA) to summarize major elements of each MWD member agency’s 2010 Urban Water Management Plan (UWMP). GHA’s report also compared the aggregate of these member agencies’ UWMPs to MWD’s 2010 Regional Urban Water Management Plan (RUWMP). The report was commissioned to better understand MWD member agencies’ projected demands and supply development strategies and how these strategies were factored in MWD’s 2010 RUWMP. MWD’s 2010 RUWMP was finalized before its member agencies completed their UWMPs. GHA’s report was received by the Water Authority board in January 2012 (see Attachment 1). It noted that MWD’s 2010 RUWMP consistently forecasted about 4-5 percent higher MWD demands when compared to its member agencies cumulative demand forecasts on MWD, under the average and multiple dry-year scenarios. This phenomenon shifted under the single dry-year scenario, where the 2010 RUWMP showed about 5 percent lower demands on MWD when compared to the cumulative member agencies’ projected demands on MWD. GHA’s report noted that due to demand patterns and availability of local supplies, member agencies’ peak single dry-year demand on MWD may not necessarily occur in the same year for all member agencies, which may account for the difference between MWD projections and member agencies’ cumulative projections. Moreover, GHA observed that any difference between MWD’s 2010 RUWMP and its member agencies UWMPs could be reduced or eliminated, if those potential projects listed in member agencies’ UWMPs were included in MWD’s 2010 RUWMP.

GHA’s report also noted that, in each of MWD’s RUWMP, starting from 2000 to 2010, overall projected retail demands and overall projected demands on MWD have steadily decreased compared to previously projected levels. The report attributed these declines to conservation, the effect of higher water rates and local water supply development. GHA concluded that MWD’s 2010 RUWMP overestimated the region’s need for imported water supplies.

In August 2011, MWD presented a preliminary comparison of MWD and six member agencies’ plans to compare MWD and its member agencies’ projections on demand and supplies. The six agencies, which account for about 70 percent of MWD’s total water deliveries, included the Water Authority, Municipal Water District of Orange County, Los Angeles Department of Water and Power, Inland Empire Utilities Agency, and Central and West Basin Municipal Water Districts. This comparison showed MWD’s projections of member agencies’ demands
were 6 percent lower than the sum of the member agencies’ own projections in a single dry-year. No comparison was shown for average and multiple dry-year scenarios. Staff reported that a more comprehensive analysis would be conducted, but none has not been produced.

Discussion
In the early 1990’s, San Diego County was heavily dependent on imported water supplies from MWD. During the drought, San Diego County experienced an extended 31 percent water supply shortage and faced 50 percent supply shortage from MWD. The “Miracle March” rains in 1991 averted the 50 percent water supply cutback. However, the region remained in a 31 percent supply shortage from MWD for 13 months, which ended in April 1992. This experience prompted San Diego leaders to take the position to “never again” rely on a single water supplier to sustain the region’s economy or quality of life for its residents’ livelihood. Today, as a result of the investments made by the Water Authority and its member agencies – including more than $3.5 billion investment in facility improvements by the Water Authority alone -- San Diego is far less dependent on imported water from MWD and, accordingly, on supplies from the Bay-Delta. In reviewing the UWMPs of Southern California cities, agencies, and water districts, it is clear that these entities are also investing in local water supply projects and conservation programs to reduce their demand on imported water supplies. Because MWD historically base loads its supply on the Colorado River, reductions in demands for water from MWD generally reduces imports from the Delta in far greater proportions than the Colorado River.

MWD’s water sales have declined by about 30 percent since 2008, with its firm sales declining to less than 1.3 MAF in fiscal year 2012. The reduction of water sales, coupled with MWD’s continuing business practice to fund local supply projects and provide long-term subsidies for these projects, has been the primary driver of sharply higher imported water rates. Increasing imported water rates have, in turn, made local water supply investments even more economically competitive. Implementation of MWD’s member agencies’ ongoing local supply development plans will further reduce MWD’s sales and the region’s reliance on imported water supplies, mainly the Bay-Delta.

Using GHA’s report, the Water Authority compiled a list of projects that show the potential to develop up to 1.2 million acre-feet (MAF) of local water supply in Southern California (See Attachment 2). The list includes 415,000 acre-feet (AF) of planned projects and nearly 800,000 AF of potential projects identified in MWD member agencies’ UWMPs. This figure does not include the estimated 650,000 AF of planned water conservation programs. When these projects are compared to those included in MWD’s 2010 RUWMP, MWD only accounted for about 103,000 AF of local water supply projects between 2015 and 2035 to offset demands on MWD. Projects such as the Carlsbad seawater desalination project – a project that is under construction and will produce up to 56,000 AF of local water supply annually, starting in 2016 – was omitted from MWD’s 2010 RUWMP, even though 150,000 AF of seawater desalination projects were previously included in MWD’s 2005 RUWMP. The result of GHA’s analysis – that MWD’s 2010 RUWMP overestimated its member agencies’ future demands on MWD – coupled with the reality that MWD’s sales have dropped by about 30 percent since 2008, demonstrate an urgent need for MWD to reevaluate its demand projections.
Instead, since the October 2010 adoption of its Integrated Resources Plan (IRP), MWD has approved 11 new agreements with some of its member agencies, under which they would reduce purchases of MWD water by as much as 67,235 AF annually; yet, would contractually commit MWD to pay them up to $295 million over the life of these projects. Following the completion of its 2010 IRP, MWD has commissioned Dr. David Sunding, a UC Berkeley professor and economist with The Brattle Group, to perform an analysis of its member agencies demands. Because of the significant drop in region’s water demands experienced since 2008, MWD retained Dr. Sunding to ascertain whether this decrease is temporary -- caused by an abnormally bad and sluggish economy -- or permanent due to a change in consumers’ attitude toward water use efficiency. The result of his analysis will help MWD recalibrate its MWD-MAIN model by which its demands are forecasted. Sunding’s analysis was supposed to be available by the June 2012; however, the release of the results has been delayed.

MWD is overdeveloping its water supplies. This is problematic for MWD at several levels: one, MWD member agencies’ forecast data showed a lower need for these supplies; and two, even if the supplies are warranted, MWD’s rates do not account for that supply development insurance. MWD is causing its member agencies to cross-subsidize by not accounting for supply insurance in its rate structure. Specifically, those agencies that are highly dependent on MWD, or have local supplies that are less hydrologically variable regardless of the type of water year, end up paying for this guarantee in low demand years. By developing more supplies than needed to meet demands, MWD runs into the likelihood of stranding the cost of its most expensive supplies.

Additionally, MWD’s overestimate in the region’s forecasted demand on MWD also overstates the magnitude of Southern California’s real need for imported water from the Bay-Delta. As MWD’s largest customer, the Water Authority has the largest stake in MWD’s investments in the Bay-Delta Conservation Plan (BDCP). The Water Authority has long been a proponent for a sustainable Delta solution and actively engages in Bay-Delta issues at the MWD board meetings and during other forums, including advocating for passage of the 2009 comprehensive Bay-Delta legislation package. The Water Authority also consistently advocates for a “right-size” Delta plan that meets the dual goals of restoring the Delta ecosystem and creating a more reliable water supply for California. In order to obtain an affordable, “right-size” Delta plan, a realistic assessment of demand for Delta water is essential. A solid understanding of MWD member agencies’ demands is foundational to sizing the BDCP; yet, MWD has not adequately factored this into its analysis.

MWD must reassess its demand projections. To ensure its long-term financial sustainability, MWD must also tie its resources planning to the willingness and firm financial commitment of its member agencies to pay. This has a direct tie to a successful implementation of a Delta fix. While the Water Authority is the largest and steadiest purchaser of water from MWD, MWD in turn, is the largest customer of the SWP – buying almost 46 percent of SWP supplies and providing about half of SWP revenues. Because more than 80 percent of MWD’s revenues are dependent on water sales, its member agencies’ decreasing imported water supply purchases are a major vulnerability for MWD. Without a revenue structure that ensures firm financial commitment by its member agencies, MWD may not have the assurance it will have adequate
revenues to meet its obligations, whether current or future. The Water Authority has expressed concern that the BDCP may fail if participants are unable to evaluate the cost-benefit of the project or limit risks their ratepayers will assume, particularly without enforceable commitments to pay for the fixed costs of the project by the SWP contractors and their member agencies. Also troubling is MWD’s abandonment of efforts to develop a Long Range Finance Plan to link its water resources spending with a finance plan.

Going forward, the Water Authority delegates and staff will continue to monitor and renew their request for a full demand and rate projection by MWD demonstrating the need for the development of the proposed water supplies as well as a cost of service analysis of these programs’ benefits to MWD’s member agencies.

Prepared by: Debbie Discar-Espe, Senior Water Resources Specialist
Reviewed by: Amy I. Chen, Director of MWD Program

Attachments:
1. Water Authority Board Memo, dated January 18, 2012
January 18, 2012

Attention: Imported Water Committee

Review of Metropolitan Water District’s (MWD) Regional Urban Water Management Plan and MWD member agencies’ urban water management plans. (Information)

Purpose
This report forwards a Water Authority-commissioned report comparing MWD demand projections included in its Regional Urban Water Management Plan (RUWMP) and those reported in MWD member agencies’ Urban Water Management Plans (UWMP).

Discussion
The MWD board approved its most recent RUWMP in November 2010, after it sought and gained State legislative approval to delay the required adoption and filing date with the Department of Water Resources (DWR) to July 1 and August 1, 2011, respectively. MWD had sought to delay the report filing date (normally due on December 31 of every 5th year) because the passage of SB X7-7 included a mandate that required retail agencies to reduce potable water demand by 20 percent by 2020. The delay was needed to afford DWR time to develop allowable 20 x 2020 compliance methodologies and for agencies to then incorporate their selected methodology into their UWMPs. Because MWD’s RUWMP was adopted well before its member agencies had finalized their UWMP’s, there is a question on how well MWD’s RUWMP is integrated with the member agencies’ UWMPs, including development of local supplies, forecasts of the retail agencies’ projected demands, and their projected demands onto MWD.

Earlier this year, the Water Authority retained the services of Gordon Hess and Associates, Inc., (GHA), to summarize major elements of each MWD member agency’s UWMP and to compare the aggregate of those plans to MWD’s RUWMP. The GHA report provides an overview of data obtained from each MWD member agency’s UWMP, including current and projected water supply and demand information, and population (See Appendix A of GHA report for individual MWD member agency UWMP summaries). The report also presents the cumulative demand on MWD as stated in member agencies’ UWMPs and compares that to MWD’s RUWMP forecasts under normal, single dry year and multiple dry years (See figures 9 through 11 of GHA report). The GHA report is not intended to be a comprehensive summary of each MWD member agency’s UWMP, nor does it include an analysis of many other UWMPs filed by water agencies (that are not MWD member agencies) including cities, utilities and agencies throughout MWD service area. Many of these agencies have plans to develop local water supplies in order to reduce demand on imported water that may not be captured in MWD member agencies’ UWMPs.

In compiling the data, GHA notes that MWD’s 2010 RUWMP excluded a number of planned local projects, even though the same types of projects were included in MWD’s 2005 RUWMP. For example, MWD included up to 150,000 acre-feet per year of projected seawater desalination in its 2005 RUWMP, but no seawater desalination was accounted for in its 2010 RUWMP.
demand projections. One of these projects is the Carlsbad seawater desalination project, a fully permitted project capable of producing 56,000 acre-feet of local supplies annually. If MWD were to include local projects such as Carlsbad projects that have been permitted, the projected demand would be lower than forecasted under its 2010 RUWMP. The projected demand would drop further if potential projects identified in member agencies UWMPs were to be included. Many of these potential projects may have become more cost-competitive as a result of MWD rate increases, the GHA report notes. See figures 12 through 14 in the GHA report for projected demands on MWD, and how they would decrease when planned projects, and planned and potential projects are considered.

The GHA report observed forecasted future member agencies’ demands on its imported water have decreased significantly in each RUWMP update between 2000 and 2010. This may due to slower growth, conservation, significantly higher water rates and local water supply development, the reported commented. The report also notes that because of the decreased forecasted demand, the 2010 RUWMP identified supply “surpluses” under all existing supply and demand scenarios that MWD examined (see Tables 9, 10, and Figures 4 through 6 of GHA report).

When comparing data shown in MWD’s RUWMP and those reported in member agencies’ UWMPs, MWD projects a greater agencies’ firm demand on MWD in average years than its member agencies project in their UWMPs. The report shows that MWD’s RUWMP projections would otherwise be the same had MWD considered all of its member agencies’ planned projects such as the Carlsbad desalination project as previously cited. Once those projects are included, the MWD and member agencies’ forecasted firm demands in average years are more similar.

During the worst case single dry-year scenario, MWD member agencies’ projected firm demands on MWD are slightly higher than MWD’s RUWMP. GHA explains that anomaly by pointing out that member agencies use a different worse single dry-year that MWD and that the dry year demands used by member agencies may not occur concurrently. This explanation supports the finding in multiple dry-years that the trend of cumulative member agency projections are consistent with the average year finding – less than MWD’s projection, as member agencies’ multiple year’s data may coincide more frequently than single dry-year’s.

The GHA report also notes that because UWMPs are not required to show wet-year demands, no comparison was made for wet-year data. MWD does not rely on water in storage in average years; it does in single dry and multiple dry years. Past trends show MWD demand decreases significantly during wet years. Coupled with MWD’s projected water rates, the GHA report notes that MWD is capable of storing adequate water in wet and even average years for use in single dry or multiple dry years. However, the report cautions that MWD and member agencies would benefit from a detailed analysis of expected availability of water for put and take in storage to ascertain water that would be available in dry years to take.

While the GHA report scope is limited to summarizing major elements of MWD member agencies’ UWMPs and comparing data from that analysis against MWD’s RUWMP, some of the findings in GHA report raise a number of issues that require further analysis:
1. MWD’s own 2010 RUWMP shows it has sufficient existing supplies to meet projected demands under all planning scenarios evaluated (single dry, multi dry and average). Has MWD identified any risks associated with the continued availability of these supplies? If not, what analysis has been done to support the Integrated Resources Plan’s recommendations for continued investment of billions of dollars in order to develop additional supplies?

2. Since MWD relies on water in storage to meet demands under dry scenarios, does MWD have an analysis showing the expected frequency and quantity of availability of water for put during the wet and average years? What is the take capability of water in storage during dry years? MWD stated during replenishment discussions last year that some of its storage investments were too expensive or otherwise unusable. Will MWD conduct an analysis of its storage portfolio so that the need for additional and current storage can be identified?

3. What is MWD’s fill strategy to ensure water would be available in dry years? Has MWD budgeted funds to utilize its own storage when water supplies are available?

4. Given the Delta discussions, and MWD’s existing supply capability, what is a right-size Delta fix that would meet MWD’s projected needs?

5. Lastly, how is MWD meeting the legislative requirements and intent set forth under SB 60 of 1999? How can it be said that there is increased dependence on conservation and local water supplies when MWD’s 2010 RUWMP shows it already has adequate supplies to meet projected demands – but it continues to plan to spend billions of ratepayer dollars on new water supplies?

These questions are not new – all have been asked by the Water Authority’s MWD delegates – the GHA report gives a solid foundation to raise them again and to demand a response which has not yet been forthcoming. The Water Authority staff will work with the MWD delegates to continue requesting answers to these questions at MWD.

Prepared by: Amy Chen, MWD Program Chief
Reviewed by: Dennis A. Cushman, Assistant General Manager

Attachment 1: GHA Report
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1.0 Overview

Every urban water supplier (supplier), as defined, is required by the California Urban Water Management Planning Act to update its Urban Water Management Plan (UWMP) and submit a complete version to the California Department of Water Resources (DWR) every five years. Each supplier is required to file its 2010 plan with DWR by August 1, 2011. The urban water management plan is intended to serve as a long-term planning tool for the supplier to ensure adequate water supplies are available for the city, water district or region it serves.

The Metropolitan Water District of Southern California (MWD) is a regional provider of imported water to all or portions of six southern California counties, including Ventura, Los Angeles, Orange, San Bernardino, Riverside and San Diego. MWD is a water wholesaler with no retail customers and provides treated and untreated water to its member agencies. MWD consists of 26 member agencies, including 14 cities, 11 municipal water districts, and one county water authority. MWD's 26 member agencies deliver to their customers a combination of local groundwater, surface water, recycled water, and imported water purchased from MWD or other sources. Roughly half of the water used in MWD's service area is purchased directly or indirectly from MWD, and therefore MWD plays an important role in ensuring coordinated planning to meet existing and future demand for water in Southern California.

MWD prepared and approved its Regional Urban Water Management Plan (RUWMP) in November 2010, approximately nine months before it was due to be filed with DWR and prior to its member agencies finalizing or approving their UWMPs. Although member agencies advise MWD in April of each year how much water they anticipate they will need during the next five years, and MWD works with its member agencies to forecast future water demands (RUWMP at page 1-7), MWD's RUWMP and the member agencies' UWMPs are not formally or functionally integrated. MWD did not seek the consent of its member agencies to include planning elements in its RUWMP that might reduce demand on MWD water supplies. Rather, MWD limited its RWUMP discussion to activities by its member agencies that relate to one of MWD's own water demand or supply management programs (RUWMP at page 1-5). For this reason, assumptions of overall future demands at the member agency level differ from what MWD has assumed in its RUWMP. Additionally, assumptions by the member agencies regarding the reliability of existing local supplies in both normal and dry years differ from MWD assumptions. These differences can, and do, lead to different projected demands on MWD by MWD, on one hand, and by its member agencies and retail water suppliers, on the other.

2.0 Scope of Report

The San Diego County Water Authority retained the services of Gordon Hess and Associates, Inc. (GHA, Inc.), to summarize major elements of each MWD member agency UWMP and compare the aggregate of those plans to MWD's RUWMP. GHA Inc. provides clients with consulting services related to policy, cost, and water rate impacts of infrastructure and water supply development. Its principal, Gordon Hess, P.E. (ghess@ghawater.com), has more than 35 years of public and private sector experience in integrated water resources planning, design and construction of water infrastructure, and formulating local, regional and federal water policies.
This report provides an overview of data obtained from each MWD member agency UWMP, including current water demand, supply sources, and population. In addition, each member agency's UWMP projected future demand, population, and supply sources are presented along with per capita water use and targets. This report is not intended to be a comprehensive summary of each member agency's UWMP, but rather, an overview and comparison of certain key information relative to future water demands on MWD. Notably, this report does not include an analysis of the many other UWMPs filed by public water suppliers including cities, utilities and agencies throughout Southern California, many of which have plans to develop local water supplies in order to reduce demand on imported water. See, generally, http://www.water.ca.gov/urbanwatermanagement/2010uwmps/.

In addition to providing a summary of MWD's and its member agencies' UWMP supply and demand projections, the cumulative demand on MWD as included in the member agency plans is presented and compared to MWD's RUWMP forecast of MWD demand for normal, single dry year, and multiple dry years.1 In a few cases, the member agency UWMP compares member agency forecasts of MWD demand to what MWD assumed for individual agency MWD demand. However, MWD's RUWMP does not provide a breakdown among individual member agencies as to demands on MWD.

All UWMPs evaluated contain detailed information regarding conservation efforts that are, or will be undertaken to accomplish SBX7-7 conservation targets for 2015 and 2020. This analysis does not summarize these efforts by MWD and its member agencies. For detailed information regarding the plans of agencies to meet conservation goals, please refer to the individual UWMPs.

### 3.0 UWMP Planning Act

The California Urban Water Management Planning Act requires all urban water suppliers in the state to prepare UWMPs and update them every five years. DWR provided a *Guidebook to Assist Urban Water Suppliers to Prepare a 2010 UWMP* for preparation of the plans. Since plans were last prepared in 2005, amendments were made to the UWMP Act, including:

- Water Code Section 10631.1 requires a plan by retail water suppliers to include water use projections for single- and multi-family residential housing needed for lower income and affordable households, to assist with compliance with the existing requirement under Section 65589.7 of the Government Code, that suppliers grant a priority for the provision of service to housing units affordable to lower income households.

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1 While this analysis provides information derived from individual and cumulative member agency UWMP forecasts and compares that to what is contained in MWD’s plan, this report is not an evaluation of the adequacy of the member agency UWMPs, nor does it verify whether member agencies’ targets or calculations for meeting SBX7-7 per capita water use goals are correct or appropriate. Each member agency has, or will submit its UWMP to DWR as required by law, and it is assumed that DWR will review the plans and note any further information that may be required to comply with applicable UWMP requirements.
- Water Code Section 10621(b) clarifies that every urban water supplier preparing a plan must give at least 60 days advanced notice to any city or county prior to the public hearing on the plan within which the supplier provides water supplies to allow for consultation on the proposed plan.
- Water Code Section 10631(j) deems water suppliers that are members of the California Urban Water Conservation Council (CUWCC) and comply with the Memorandum of Understanding (MOU), as it may be amended, to be in compliance with the requirement to describe the supplier’s water demand management measures in its UWMP.
- Water Code Section 10631.7 required DWR, in consultation with the CUWCC, to convene a technical panel, no later than January 1, 2009, to provide information and recommendations to DWR and the Legislature on new demand management measures, technologies, and approaches. The panel and DWR were to report to the Legislature on their findings no later than January 1, 2010 and every five years thereafter;
- Water Code Section 10633(d) clarifies that the “indirect potable reuse” of recycled water should be described and quantified in the plan, including a determination regarding the technical and economic feasibility of serving those uses.
- Water Code Section 10644(c) requires DWR to recognize exemplary efforts by water suppliers by obligating DWR to identify and report to the technical panel, described above, and “exemplary elements” of individual water suppliers’ plans, meaning any water demand management measures adopted and implemented by specific urban water suppliers that achieve water savings significantly above the levels required to meet the conditions for state grant or loan funding.
- Water Code Section 10631.5 was amended to address conditions of eligibility for grants or loans from DWR. DWR will consider whether the urban water supplier has submitted an updated plan when determining eligibility for funds made available pursuant to any program administered by the Department.

In addition to changes in the Act, the state Legislature passed Senate Bill 7 as part of the Seventh Extraordinary Session, referred to as SBX7-7, on November 10, 2009, which became effective February 3, 2010. This new law was the water conservation component of the Delta legislation package, and seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. The law requires each urban retail water supplier to develop urban water use targets to help meet the 20 percent goal by 2020, and an interim water reduction target by 2015. Urban retail water suppliers must include in their 2010 plans the following information from the bill’s target setting process: (1) baseline daily per capita water use; (2) urban water use target; (3) interim water use target; (4) compliance daily per capita water use, including technical bases and supporting data for those determinations. An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan. (Water Code Section 10608.20.) Wholesale water suppliers must include in their 2010 Plans an assessment of their present and proposed future measures, programs and policies to help retail agencies achieve their water use reduction targets.
Additionally, Water Code Sections 10910 through 10914 and Government Code Sections 65867.5, 66455.3, and 66473.7 (commonly referred to as SB 610 and SB 221) amended state law effective January 1, 2002 to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the environmental documentation of certain large proposed projects. SB 221 requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are available for certain large residential subdivisions of property prior to approval of a tentative map. Most plans contain documentation on the existing and planned water supplies being developed by the water provider that can be used in preparing the water supply assessments and written verifications required under state law. Specific documentation on MWD supplies can be found in its RUWMP.

4.0 MWD's Regional Urban Water Management Plans – Past and Present

MWD is a water wholesaler with no retail customers, providing treated and untreated water directly to its 26 member agencies. For some member agencies, MWD supplies all the water provided by the agency within its service area, while others obtain varying amounts of water from MWD to supplement their local and other imported supplies. MWD provides between 45 and 60 percent of the municipal, industrial, and agricultural water used in its service area.

After the drought of 1987-1992, MWD faced changed conditions and the need to develop a long-term water resources strategy to fulfill the agency’s stated mission of providing reliable water supplies to its service area. An integrated resources planning process was undertaken and MWD’s first Integrated Resources Plan (IRP) was adopted in 1996. The plan recognized that MWD’s role increasingly should be focused on coordinating its planning activities with those of its member agencies and the other retail water suppliers they serve (RUWMP at page 2-2). The plan also recognized that the region’s future water supply reliability would increasingly depend on striking a balance between demand management and supply augmentation by MWD, its member agencies and other public water suppliers. The resulting IRP strategy attempted to balance demand management, imported supply augmentation and local supply development. In dry years, MWD was counting on conservation, local supplies, withdrawal from storage, and water transfers to augment available imported water supplies. From this plan, MWD developed a RUWMP in 2000. The plan estimated average year, single dry year, and multiple dry year demands on MWD to the year 2020 as follows:

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The 2000 plan estimated groundwater replenishment as follows:

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<td>0.18</td>
</tr>
</tbody>
</table>

From this, the net firm demand on MWD can be determined by subtracting groundwater replenishment demand from the MWD total demand:

<table>
<thead>
<tr>
<th>Net Firm MWD Demand, MAF/Yr</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Year</td>
<td>1.74</td>
<td>1.79</td>
<td>1.91</td>
<td>2.12</td>
</tr>
<tr>
<td>Single Dry Year</td>
<td>1.74</td>
<td>1.80</td>
<td>1.91</td>
<td>2.13</td>
</tr>
<tr>
<td>Multiple Dry Years</td>
<td>2.04</td>
<td>2.08</td>
<td>2.19</td>
<td>2.39</td>
</tr>
</tbody>
</table>

In 2004, the MWD Board adopted an updated IRP. Legislation concerning population growth and water supply called for further planning considerations. The IRP Update had three objectives: (1) Review the goals and achievements of the 1996 IRP; (2) Identify the changed conditions for water resource development; and (3) Update resource development targets through 2025 (RUWMP at page 2-2). The 2004 IRP process also updated the long-term plan to account for the new water planning legislation. MWD’s RUWMP states that, “the updated plan contained resource development targets through 2025, which reflected changed conditions; particularly increased conservation savings, planned increases in local supplies and uncertainties” (RUWMP at page 2-2). The “uncertainties” noted by MWD were “the level of population and economic growth which directly drive water demands, water quality regulations, new chemicals found to be unhealthful, endangered species affecting sources of supplies, and periodic and new changes in climate and hydrology” (RUWMP at pages 2-2–2-3). To address these uncertainties, MWD added a 10 percent “planning buffer” of additional water supply to be developed. Estimated MWD demands from the 2004 update were used as the basis for MWD 2005 Urban Water Management Plan. The plan estimated average year, single dry year, and multiple dry years demands on MWD to the year 2030 as follows:

<table>
<thead>
<tr>
<th>Total MWD Demand, MAF/Yr</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Year</td>
<td>2.262</td>
<td>2.191</td>
<td>2.234</td>
<td>2.341</td>
<td>2.460</td>
</tr>
<tr>
<td>Single Dry Year</td>
<td>2.523</td>
<td>2.414</td>
<td>2.457</td>
<td>2.565</td>
<td>2.671</td>
</tr>
<tr>
<td>Multiple Dry Years</td>
<td>2.570</td>
<td>2.499</td>
<td>2.515</td>
<td>2.635</td>
<td>2.761</td>
</tr>
</tbody>
</table>
For the 2005 plan, firm demand on MWD was shown as follows:

<table>
<thead>
<tr>
<th>Firm MWD Demand, MAF/Yr</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Year</td>
<td>2.063</td>
<td>1.985</td>
<td>2.029</td>
<td>2.141</td>
<td>2.269</td>
</tr>
<tr>
<td>Single Dry Year</td>
<td>2.348</td>
<td>2.234</td>
<td>2.275</td>
<td>2.388</td>
<td>2.511</td>
</tr>
<tr>
<td>Multiple Dry Years</td>
<td>2.420</td>
<td>2.341</td>
<td>2.355</td>
<td>2.479</td>
<td>2.609</td>
</tr>
</tbody>
</table>

MWD again updated its IRP in 2010. MWD described the basic objectives of the 2010 IRP update as follows: “1. Review the achievements of the 1996 IRP and the 2004 Update; 2. Identify changing conditions affecting water resource management (attention will be given to emerging factors and considerations, such as the current drought, climate change, energy use, and changes in Delta pumping operations); and 3. Update resource development targets through 2030 (discussion will focus on adaptation to future uncertainties, and potential alternatives for further diversifying Metropolitan’s water resource portfolio and increasing supply reliability in the face of changing circumstances” (RUWMP at page 2-3).

MWD's 2010 RUWMP was derived from the 2010 IRP update, and again estimated average year, single dry year, and multiple dry years demands on MWD as follows:

**Total Demand:**

<table>
<thead>
<tr>
<th>Total MWD Demand, MAF/Yr</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Year</td>
<td>1.928</td>
<td>1.763</td>
<td>1.808</td>
<td>1.874</td>
<td>1.931</td>
</tr>
<tr>
<td>Single Dry Year</td>
<td>2.094</td>
<td>1.993</td>
<td>2.025</td>
<td>2.080</td>
<td>2.146</td>
</tr>
<tr>
<td>Multiple Dry Years</td>
<td>2.154</td>
<td>2.049</td>
<td>2.106</td>
<td>2.163</td>
<td>2.224</td>
</tr>
</tbody>
</table>

**Firm Demand:**

<table>
<thead>
<tr>
<th>Firm MWD Demand, MAF/Yr</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Year</td>
<td>1.826</td>
<td>1.660</td>
<td>1.705</td>
<td>1.769</td>
<td>1.826</td>
</tr>
<tr>
<td>Single Dry Year</td>
<td>1.991</td>
<td>1.889</td>
<td>1.921</td>
<td>1.974</td>
<td>2.039</td>
</tr>
<tr>
<td>Multiple Dry Years</td>
<td>2.056</td>
<td>1.947</td>
<td>2.003</td>
<td>2.059</td>
<td>2.119</td>
</tr>
</tbody>
</table>

As can be seen in the figures below, each MWD Regional Urban Water Management, from 2000 to 2010, resulted in decreased projections of firm demands on MWD.
Figure 1

Comparison of Current and Past UWMP's
MWD Average Firm Demands

-18%  -22%

Figure 2

Comparison of Current and Past UWMP's
MWD Single Dry Year Firm Demands

-17%  -21%
5.0 MWD Demands According to MWD’s RUWMP

MWD’s 26 member agencies deliver to their customers a combination of local groundwater, local surface water, recycled water, and imported water purchased from MWD and other sources. Some MWD member agencies provide retail water service, while others provide water to the local area as wholesalers (see RUWMP, Table 1-2 at page 1-8, reproduced below). For some member agencies, MWD supplies all the water used within that agency's service area, while others obtain varying amounts of imported water from MWD to supplement local supplies. This local supply comes from local wells, local surface water, recycling and desalination. Two agencies import water from sources other than MWD: The City of Los Angeles brings imported water from the eastern Sierra Nevada mountains through its Los Angeles Aqueduct; and the San Diego County Water Authority (SDCWA) imports conserved water from the Imperial Irrigation District and the All-American and Coachella Canal lining projects through MWD's Colorado River Aqueduct and other MWD facilities. Member agencies also have water conservation programs that reduce demand on MWD imported water supplies.

Table 8- MWD's Member Agencies and Type of Water Service Provided

<table>
<thead>
<tr>
<th>County and Member Agency</th>
<th>Type of Water Service</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Los Angeles County</strong></td>
<td></td>
</tr>
<tr>
<td>Beverly Hills, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>Burbank, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>Central Basin Municipal Water District</td>
<td>Wholesale</td>
</tr>
<tr>
<td>Compton, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>Foothill Municipal Water District</td>
<td>Wholesale</td>
</tr>
<tr>
<td>Glendale, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>Las Virgenes Municipal Water District</td>
<td>Retail</td>
</tr>
<tr>
<td>Long Beach, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>Los Angeles, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>Pasadena, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>San Fernando, City</td>
<td>Retail</td>
</tr>
<tr>
<td>San Marino, City</td>
<td>Retail</td>
</tr>
<tr>
<td>Santa Monica, City</td>
<td>Retail</td>
</tr>
<tr>
<td>Three Valleys Municipal Water District</td>
<td>Wholesale</td>
</tr>
<tr>
<td>Torrance, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>Upper San Gabriel Valley Municipal Water District</td>
<td>Wholesale</td>
</tr>
<tr>
<td>West Basin Municipal Water District</td>
<td>Wholesale</td>
</tr>
<tr>
<td><strong>Orange County</strong></td>
<td></td>
</tr>
<tr>
<td>Anaheim, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>Fullerton, City of</td>
<td>Retail</td>
</tr>
<tr>
<td>Municipal Water District of Orange County</td>
<td>Wholesale</td>
</tr>
<tr>
<td>Santa Ana, City of</td>
<td>Retail</td>
</tr>
<tr>
<td><strong>Riverside County</strong></td>
<td></td>
</tr>
<tr>
<td>Eastern Municipal Water District</td>
<td>Retail and Wholesale</td>
</tr>
</tbody>
</table>

Page 178 of 494
<table>
<thead>
<tr>
<th>Western Municipal Water District</th>
<th>Retail and Wholesale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>San Bernardino County</strong></td>
<td></td>
</tr>
<tr>
<td>Inland Empire Utilities Agency</td>
<td>Wholesale</td>
</tr>
<tr>
<td><strong>San Diego County</strong></td>
<td></td>
</tr>
<tr>
<td>San Diego County Water Authority</td>
<td>Wholesale</td>
</tr>
<tr>
<td><strong>Ventura County</strong></td>
<td></td>
</tr>
<tr>
<td>Calleguas Municipal Water District</td>
<td>Wholesale</td>
</tr>
</tbody>
</table>

Approximately 250 retail water suppliers including cities, utilities and water agencies directly serve water ratepayers throughout MWD’s service area. MWD’s member agencies collectively serve 152 cities and 89 unincorporated communities (RUWMP, Table 1-3 at page 1-9). As noted earlier, this report does not analyze or address the UWMPs filed by all of these retail water suppliers. However, it may be noted generally that many retail water suppliers have plans to develop local water supplies in order to reduce demand on imported water. Further, the plans of some retail agencies appear to be inconsistent with the plans of MWD member agencies. Some agencies, such as the Water Replenishment District of Southern California, that are not required to prepare and file an UWMP also have plans to reduce future purchases of imported water.
Each of the MWD member agencies prepared a 2010 UWMP. Like MWD's RUWMP, wholesale member agencies' UWMPs are used as a planning tool to provide retail water suppliers guidance as to the demand and availability of water supplies. All member agencies stated that they coordinated with MWD in the preparation of UWMPs; however, not all agencies used the same supply and demand estimates that were the basis of the MWD RUWMP. In many cases, wholesale member agencies had separate models that estimated future demands, or received and used information provided by their own retail agencies. In some cases, such as Calleguas MWD, differences between MWD's RUWMP forecast of demands on MWD for the agency are compared to the agency's own forecast of demands. Each agency summary in Appendix A provides an overview of the member agency and how the member agency forecast its demands. Appendix B provides specific data from the member agency plans and cumulative totals for supplies and demands contained in the plans.
There are also differences between what a member agency assumes in its forecast of local supply development and what local supply development MWD assumes in its RUWMP. Examples of these differences include both the quantity of available existing supplies, such as Los Angeles Aqueduct flows during normal, dry and multiple dry year conditions and the planning assumptions of availability of future supplies. The San Diego County Water Authority, Long Beach, and West Basin MWD all include seawater desalination in their future available supplies, but MWD does not account in its 2010 RUWMP for any seawater desalination in its estimate of member agency local water supplies. This is in contrast to MWD’s 2005 RUWMP, when it included in its planning 150,000 acre-feet of seawater desalination as future available local water supplies.

All MWD member agencies prepared UWMP’s in accordance with DWR guidelines for plans. Each plan included discussion of demographics, available water supplies and quality, regional and local water supply programs, low income household water use, overall water supply and demands, demand management, reliability planning and emergency contingency planning. Most agencies cited and depended upon MWD’s RUWMP, particularly MWD’s Tables 2-9, 2-10, and 2-11 (as shown on pages 12, 13, and 14) as the basis for their conclusions that sufficient (or even surplus) imported water supplies exist to meet their future imported water demands. These MWD tables show what MWD estimates as its surplus supply in average, single dry year, and multiple dry years with the “Capability of Current Program” as follows:

### Table 9- MWD’s Estimated Surplus Supplies with Current Program Capability, Acre-Feet per Year

<table>
<thead>
<tr>
<th>Supply Condition</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Year</td>
<td>1,479,000</td>
<td>1,877,000</td>
<td>2,104,000</td>
<td>1,898,000</td>
<td>1,708,000</td>
</tr>
<tr>
<td>Single Dry Year</td>
<td>286,000</td>
<td>620,000</td>
<td>776,000</td>
<td>569,000</td>
<td>371,000</td>
</tr>
<tr>
<td>Multiple Dry Year</td>
<td>12,000</td>
<td>229,000</td>
<td>237,000</td>
<td>120,000</td>
<td>16,000</td>
</tr>
</tbody>
</table>

MWD’s projections of surplus supplies under all planning scenarios and years are not stated to be dependent upon implementation of interim or permanent Bay-Delta conveyance projects. MWD also estimated how much its surplus supply would increase should programs under development be added to its supply. These programs include adding additional in-region storage programs, programs on the California Aqueduct (Bay-Delta conveyance improvements), and additional Colorado River supplies. The Colorado River Aqueduct (CRA) is assumed to be full (1.25 MAF) under both the current program and "Programs Under Development" scenarios.

### Table 10- MWD’s Estimated Surplus Supplies with Capability of "Programs Under Development" Acre-Feet per Year

<table>
<thead>
<tr>
<th>Supply Condition</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Year</td>
<td>2,067,000</td>
<td>2,566,000</td>
<td>3,155,000</td>
<td>2,949,000</td>
<td>2,759,000</td>
</tr>
<tr>
<td>Single Dry Year</td>
<td>1,048,000</td>
<td>1,482,000</td>
<td>1,812,000</td>
<td>1,605,000</td>
<td>1,407,000</td>
</tr>
<tr>
<td>Multiple Dry Year</td>
<td>416,000</td>
<td>782,000</td>
<td>970,000</td>
<td>875,000</td>
<td>771,000</td>
</tr>
</tbody>
</table>
Table 2-9  
Single Dry-Year  
Supply Capability\(^1\) and Projected Demands  
Repeat of 1977 Hydrology  
(acre-feet per year)

<table>
<thead>
<tr>
<th>Forecast Year</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Region Storage and Programs</td>
<td>685,000</td>
<td>931,000</td>
<td>1,076,000</td>
<td>964,000</td>
<td>830,000</td>
</tr>
<tr>
<td>California Aqueduct(^2)</td>
<td>522,000</td>
<td>601,000</td>
<td>651,000</td>
<td>609,000</td>
<td>610,000</td>
</tr>
<tr>
<td>Colorado River Aqueduct (^3)</td>
<td>1,416,000</td>
<td>1,824,000</td>
<td>1,669,000</td>
<td>1,419,000</td>
<td>1,419,000</td>
</tr>
<tr>
<td>Aqueduct Capacity Limit(^4)</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
</tr>
<tr>
<td>Colorado River Aqueduct Capability</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
</tr>
<tr>
<td>Capability of Current Programs</td>
<td>2,457,000</td>
<td>2,782,000</td>
<td>2,977,000</td>
<td>2,823,000</td>
<td>2,690,000</td>
</tr>
</tbody>
</table>

Demands

| Firm Demands of Metropolitan | 1,991,000 | 1,889,000 | 1,921,000 | 1,974,000 | 2,039,000 |
|IID-SDCWA Transfers and Canal Linings | 180,000 | 273,000 | 280,000 | 280,000 | 280,000 |

Total Demands on Metropolitan\(^5\) | 2,171,000 | 2,162,000 | 2,201,000 | 2,254,000 | 2,319,000 |

Surplus | 286,000 | 620,000 | 776,000 | 569,000 | 371,000 |

Programs Under Development

| In-Region Storage and Programs | 206,000 | 306,000 | 336,000 | 336,000 | 336,000 |
|California Aqueduct | 556,000 | 556,000 | 700,000 | 700,000 | 700,000 |
| Colorado River Aqueduct \(^3\)  | 187,000 | 187,000 | 187,000 | 182,000 | 182,000 |
| Aqueduct Capacity Limit\(^4\)   | 0 | 0 | 0 | 0 | 0 |
| Colorado River Aqueduct Capability | 0 | 0 | 0 | 0 | 0 |
| Capability of Proposed Programs | 762,000 | 862,000 | 1,036,000 | 1,036,000 | 1,036,000 |
| Potential Surplus | 1,048,000 | 1,482,000 | 1,812,000 | 1,605,000 | 1,407,000 |

\(^1\) Represents Supply Capability for resource programs under listed year type.  
\(^2\) California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.  
\(^3\) Colorado River Aqueduct includes water management programs, IID-SDCWA transfers and canal linings conveyed by the aqueduct.  
\(^4\) Maximum CRA deliveries limited to 1.25 MAF including IID-SDCWA transfers and canal linings.  
\(^5\) Firm demands are adjusted to include IID-SDCWA transfers and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.  

---

**WATER SUPPLY RELIABILITY**  
2-17
Figure 5- MWD’s Table 2-10 from the 2010 RUWMP

| Table 2-10 |
| Multi-Year Supply Capability\(^1\) and Projected Demands |
| Repeat of 1990-1992 Hydrology (acre-feet per year) |

<table>
<thead>
<tr>
<th>Forecast Year</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Programs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-Region Storage and Programs</td>
<td>246,000</td>
<td>373,000</td>
<td>435,000</td>
<td>398,000</td>
<td>353,000</td>
</tr>
<tr>
<td>California Aqueduct(^2)</td>
<td>752,000</td>
<td>794,000</td>
<td>835,000</td>
<td>811,000</td>
<td>812,000</td>
</tr>
<tr>
<td>Colorado River Aqueduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado River Aqueduct Supply(^3)</td>
<td>1,318,000</td>
<td>1,600,000</td>
<td>1,417,000</td>
<td>1,416,000</td>
<td>1,416,000</td>
</tr>
<tr>
<td>Aqueduct Capacity Limit(^4)</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
</tr>
<tr>
<td>Colorado River Aqueduct Capability</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
<td>1,250,000</td>
</tr>
<tr>
<td><strong>Capability of Current Programs</strong></td>
<td>2,248,000</td>
<td>2,417,000</td>
<td>2,520,000</td>
<td>2,459,000</td>
<td>2,415,000</td>
</tr>
<tr>
<td><strong>Demands</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Demands of Metropolitan</td>
<td>2,056,000</td>
<td>1,947,000</td>
<td>2,003,000</td>
<td>2,059,000</td>
<td>2,119,000</td>
</tr>
<tr>
<td>IID-SDCWA Transfers and Canal Linings</td>
<td>180,000</td>
<td>241,000</td>
<td>280,000</td>
<td>280,000</td>
<td>280,000</td>
</tr>
<tr>
<td><strong>Total Demands on Metropolitan(^1)</strong></td>
<td>2,236,000</td>
<td>2,188,000</td>
<td>2,283,000</td>
<td>2,339,000</td>
<td>2,399,000</td>
</tr>
<tr>
<td><strong>Surplus</strong></td>
<td>12,000</td>
<td>229,000</td>
<td>237,000</td>
<td>120,000</td>
<td>16,000</td>
</tr>
<tr>
<td><strong>Programs Under Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-Region Storage and Programs</td>
<td>162,000</td>
<td>280,000</td>
<td>314,000</td>
<td>336,000</td>
<td>336,000</td>
</tr>
<tr>
<td>California Aqueduct</td>
<td>242,000</td>
<td>273,000</td>
<td>419,000</td>
<td>419,000</td>
<td>419,000</td>
</tr>
<tr>
<td>Colorado River Aqueduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado River Aqueduct Supply(^3)</td>
<td>187,000</td>
<td>187,000</td>
<td>187,000</td>
<td>182,000</td>
<td>182,000</td>
</tr>
<tr>
<td>Aqueduct Capacity Limit(^4)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Colorado River Aqueduct Capability</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Capability of Proposed Programs</strong></td>
<td>404,000</td>
<td>553,000</td>
<td>733,000</td>
<td>755,000</td>
<td>755,000</td>
</tr>
<tr>
<td><strong>Potential Surplus</strong></td>
<td>416,000</td>
<td>762,000</td>
<td>970,000</td>
<td>875,000</td>
<td>771,000</td>
</tr>
</tbody>
</table>

\(^1\) Represents Supply Capability for resource programs under listed year type.

\(^2\) California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.

\(^3\) Colorado River Aqueduct includes water management programs, IID-SDCWA transfers and canal linings conveyed by the aqueduct.

\(^4\) Maximum CRA deliveries limited to 1.25 MAF including IID-SDCWA transfers and canal linings.

\(^5\) Firm demands are adjusted to include IID-SDCWA transfers and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.
### Figure 6- MWD’s Table 2-11 from the 2010 RUWMP

#### Table 2-11

<table>
<thead>
<tr>
<th>Average Year</th>
<th>Supply Capability&lt;sup&gt;1&lt;/sup&gt; and Projected Demands</th>
<th>Average of 1922-2004 Hydrologies (acre-feet per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast Year</td>
<td>2015</td>
<td>2020</td>
</tr>
<tr>
<td><strong>Current Programs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-Region Storage and Programs</td>
<td>685,000</td>
<td>931,000</td>
</tr>
<tr>
<td>California Aqueduct&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1,550,000</td>
<td>1,629,000</td>
</tr>
<tr>
<td>Colorado River Aqueduct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado River Aqueduct Supply&lt;sup&gt;3&lt;/sup&gt;</td>
<td>1,507,000</td>
<td>1,529,000</td>
</tr>
<tr>
<td>Aqueduct Capacity Limit&lt;sup&gt;4&lt;/sup&gt;</td>
<td>1,250,000</td>
<td>1,250,000</td>
</tr>
<tr>
<td>Colorado River Aqueduct Capability</td>
<td>1,250,000</td>
<td>1,250,000</td>
</tr>
<tr>
<td><strong>Capability of Current Programs</strong></td>
<td>3,485,000</td>
<td>3,810,000</td>
</tr>
<tr>
<td><strong>Demands</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Demands of Metropolitan</td>
<td>1,826,000</td>
<td>1,660,000</td>
</tr>
<tr>
<td>IID-SDCWA Transfers and Canal Linings</td>
<td>180,000</td>
<td>273,000</td>
</tr>
<tr>
<td><strong>Total Demands on Metropolitan&lt;sup&gt;4&lt;/sup&gt;</strong></td>
<td>2,006,000</td>
<td>1,933,000</td>
</tr>
<tr>
<td><strong>Surplus</strong></td>
<td>1,479,000</td>
<td>1,877,000</td>
</tr>
<tr>
<td><strong>Programs Under Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-Region Storage and Programs</td>
<td>206,000</td>
<td>306,000</td>
</tr>
<tr>
<td>California Aqueduct</td>
<td>382,000</td>
<td>383,000</td>
</tr>
<tr>
<td>Colorado River Aqueduct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado River Aqueduct Supply&lt;sup&gt;3&lt;/sup&gt;</td>
<td>187,000</td>
<td>187,000</td>
</tr>
<tr>
<td>Aqueduct Capacity Limit&lt;sup&gt;4&lt;/sup&gt;</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Colorado River Aqueduct Capability</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Capability of Proposed Programs</strong></td>
<td>588,000</td>
<td>689,000</td>
</tr>
<tr>
<td><strong>Potential Surplus</strong></td>
<td>2,047,000</td>
<td>2,566,000</td>
</tr>
</tbody>
</table>

---

<sup>1</sup> Represents Supply Capability for resource programs under listed year type.

<sup>2</sup> California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.

<sup>3</sup> Colorado River Aqueduct includes water management programs, IID-SDCWA transfers and canal linings conveyed by the aqueduct.

<sup>4</sup> Maximum CRA deliveries limited to 1.25 MAF including IID-SDCWA transfers and canal linings.

<sup>5</sup> Firm demands are adjusted to include IID-SDCWA transfers and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.
6.0 MWD Demands According to Member Agencies' UWMPs

While most MWD member agencies used a fairly consistent format in their UWMPs, each plan has differences in how data or projections are reported. Most plans show supply and demand projections for 2015 to 2035 in five year increments for normal and single dry years, the multiple (three-year) dry year scenarios are not necessarily three dry years ending in 2015, 2020, 2025, 2030, or 2035. In these cases and for the purpose of being able to cumulate data from all MWD agencies, the third year of the three year sequence is shown, and if this third year does not end on 2015, 2020, etc., then the supply and demand figures shown in the summaries are the third year of the dry year sequence closest to year 2015, 2020, etc. In cases where the member agency UWMP goes to the year 2030 rather than the year 2035, 2030 figures are also shown in 2035.

The MWD member agencies' summaries shown in Appendix A include population, overall water demands and water supply. Overall demand includes firm demands, non-firm demands such as demand for replenishment supplies and recycled water demand for direct use (does not include recycled water used for replenishment purposes). Some agencies, such as Foothill Municipal Water District, provide imported water to its customers (sub-agencies), but did not report in the UWMP use of other local supplies by these sub-agencies. It is for this reason that the accumulation of Total Water Use among each of the MWD member agency UWMPs include most, but not necessarily all of the local supplies used with the MWD service area. However, the accumulations of all MWD supply and demand among the member agencies' UWMPs does include all MWD demands from the members, subject to any assumptions as noted on each summary.

The MWD member agencies are not consistent in the way they account for available MWD (or local) supplies. Some agencies "balance" supply and demand, i.e. the total supply available equals the total demand, even if the agency has additional supplies available. Others, such as Central Basin MWD assumes that its Tier 1 purchase commitment will be available under each supply scenario and this serves as the basis for its estimated MWD demand. Other agencies estimate available MWD demands by applying the percentage of MWD surplus supplies noted in MWD's Tables 2-9, 2-10, or 2-11 towards their estimated MWD demand, thus assuming that MWD will have more than enough supplies to meet their estimated demands. In these cases, supply and demand are not "balanced" as the UWMP reports supply exceeding demands.

The following table shows the cumulative firm MWD demands as reported in the member agency UWMP's for years 2015 to 2035 for Average year, Single Dry Year, and Multiple Dry Year conditions:

<table>
<thead>
<tr>
<th>Supply Condition</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Year</td>
<td>1,717,165</td>
<td>1,561,752</td>
<td>1,612,426</td>
<td>1,690,852</td>
<td>1,750,335</td>
</tr>
<tr>
<td>Single Dry Year</td>
<td>2,119,650</td>
<td>1,947,778</td>
<td>2,006,438</td>
<td>2,096,558</td>
<td>2,156,846</td>
</tr>
<tr>
<td>Multiple Dry Year</td>
<td>1,931,006</td>
<td>1,906,190</td>
<td>1,935,301</td>
<td>1,991,160</td>
<td>2,206,004</td>
</tr>
</tbody>
</table>
Average year demands represent those demands that member agencies expect to place on MWD when existing local supplies are available, planned new supplies are on-line, and accounting for expected population and demand increases after planned conservation efforts are achieved to meet SBX7-7 requirements. Some agencies expect to implement additional conservation measures that would lower expected MWD demands further. As expected, single dry year (worst case) demands on MWD are higher than average year demands, due to less availability of local supplies. The third year of a three year multiple dry year sequence is slightly less than the single dry year worst case, as public awareness and conservation efforts are increased. The UWMPs do not include MWD demands for a wet year, or multiple wet year sequence, however it would be expected that under such conditions local supplies would be more abundant, overall demands could be reduced slightly, and MWD firm demands would be significantly lower than under average year conditions.

Below, are average year and a comparison of average and dry year demands for each member agency for the year 2020, as reported in the UWMP’s:

Figure 7
As shown, most agencies’ UWMP dry year demands on MWD are greater than average year demands. However, the degree of dry year peaking (ratio of dry year demand to average year) on MWD varies greatly, from up to 224% for the City of Los Angeles to zero for the City of Santa Monica. The volume of water required to meet dry year peaking also varies greatly, from up to 240,980 acre-feet for the City of Los Angeles to a decrease of 31,024 for Inland Empire Utilities Agency. In the case of Inland Empire Utilities Agency, its UWMP calls for increased pumping from groundwater basins to reduce imported water demands (the reduction is shown as a negative number). In the case of the San Diego County Water Authority, the above represents only purchases of MWD supplies and not transportation services.

Each MWD member agency reports local supplies that it expects will be available in future years. While MWD’s RUWMP includes local supplies in its forecasts, certain significant differences were identified between the supplies MWD assumed to be available and the supplies the MWD member agencies assumed in their plans. These supplies, if included in MWD’s RUWMP, would further reduce MWD projected demands from its member agencies:
<table>
<thead>
<tr>
<th>Local Supply</th>
<th>Included in Member Agency UWMP Future Supply</th>
<th>Included in MWD's RUWMP as a Local Supply</th>
<th>Annual Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Beach - Seawater Desalination</td>
<td>Yes</td>
<td>No</td>
<td>5,000 AF beginning in 2025</td>
</tr>
<tr>
<td>SDCWA - Seawater Desalination</td>
<td>Yes</td>
<td>No</td>
<td>56,000 AF beginning in 2020</td>
</tr>
<tr>
<td>West Basin - Seawater Desalination</td>
<td>Yes</td>
<td>No</td>
<td>21,500 AF beginning in 2020</td>
</tr>
<tr>
<td>Los Angeles Aqueduct-Difference in Supply Assumptions</td>
<td>Yes</td>
<td>No</td>
<td>28,000 AF in 2015 decreasing to 14,000 AF in 2035 for average years; In single dry year LADWP's RUWMP estimates 17,480 to 19,060 AF less than MWD's RUWMP. In multiple dry years LADWP's UWMP estimates 27,700 to 42,770 AF more than MWD's RUWMP</td>
</tr>
<tr>
<td>LADWP Water Transfers</td>
<td>Yes</td>
<td>No</td>
<td>40,000 AF Beginning in 2015</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>136,500 to 150,500 AF/Yr. for average years. 99,620 to 104,200 AF/Yr for dry years and 150,320 to 165,270 AF/Yr in multiple dry years</td>
</tr>
</tbody>
</table>

In addition to the above, two MWD member agencies (Calleguas MWD and the City of Burbank) specifically detail how MWD's RUWMP projections are higher than their own UWMP projections. In the case of Calleguas MWD, its assumptions for future local supply is greater than what MWD considered in its RUWMP. In the case of the City of Burbank, its UWMP states that "Burbank's projections in this plan go beyond the minimum conservation required even though MWD is planning for somewhat higher demands." These specific differences result in a further estimated decrease in MWD demands of 5,750 to 18,683 acre-feet per year for Calleguas MWD and 1,350 acre-feet per year for the City of Burbank, depending on the year and hydrologic scenario.
Additional potential local water supply development was identified in the member agency UWMP’s that if implemented, would further reduce both MWD’s forecasted demand and member agency projections of their demand on MWD. These local supplies include:

<table>
<thead>
<tr>
<th>Local Supply</th>
<th>Included in Member Agency UWMP as Potential Supply</th>
<th>Included in Member Agency UWMP or MWD RUWMP Demand Forecast</th>
<th>Annual Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>LADWP Storm water Capture and Replenishment</td>
<td>Yes</td>
<td>No</td>
<td>2,000 AF in 2015 and expanding to 25,000 AF by 2035</td>
</tr>
<tr>
<td>Water Replenishment District GRIP Project (Central Basin MWD)</td>
<td>Yes, as a CBMWD Project</td>
<td>No</td>
<td>21,000 AF</td>
</tr>
<tr>
<td>Foothill MWD Water Reclamation</td>
<td>Yes</td>
<td>No</td>
<td>1,280 AF Beginning in 2020</td>
</tr>
<tr>
<td>MWDOC Seawater Desalination-Huntington Beach</td>
<td>Yes</td>
<td>No</td>
<td>56,000 AF Beginning in 2020</td>
</tr>
<tr>
<td>MWDOC Seawater Desalination-San Juan Capistrano</td>
<td>Yes</td>
<td>No</td>
<td>16,000 AF Beginning in 2020</td>
</tr>
<tr>
<td>MWDOC- Irvine Ranch WD Strand Ranch- Dry Year Yield</td>
<td>Yes</td>
<td>No</td>
<td>16,666 AF in dry years</td>
</tr>
<tr>
<td>Three Valleys MWD-Additional Project</td>
<td>Yes</td>
<td>No</td>
<td>28,000 AF Beginning in 2020</td>
</tr>
<tr>
<td>Calleguas MWD-Additional Conservation</td>
<td>Yes</td>
<td>No</td>
<td>22,250 AF beginning in 2020</td>
</tr>
<tr>
<td>City of Torrance-Expanded Recycle Water and Goldsworthy Desalter</td>
<td>Yes</td>
<td>No</td>
<td>Unspecified</td>
</tr>
</tbody>
</table>

Total: 186,200 + AF/Yr.
7.0 Comparison of MWD Demands Projected by MWD and its Member Agencies

A comparison of MWD's RUWMP forecast of its demands from member agencies shows that MWD's forecasts are higher in the average and multiple dry year scenarios than the cumulative forecasts made by its member agencies and lower in the single dry year scenario:

Figure 9

![Graph showing Agencies' UWMP Demand on MWD vs. MWD's UWMP Forecast for an Average Year, AF/Yr.]

Figure 10

![Graph showing Agencies' UWMP Demand on MWD vs. MWD's UWMP Demand for a Single Dry Year, AF/Yr.]

As noted above, MWD's 2005 RUWMP included 150,000 acre-feet per year of seawater desalination, but no seawater desalination was included in MWD's 2010 RUWMP projections as a local supply. One of these projects is a fully permitted project for the development of 56,000 acre-feet of local water supply annually. Had MWD included current member agency plans for seawater desalination in its RUWMP forecasts, its average year demands would be similar to the cumulative forecasts contained in the member agencies UWMPs. Had MWD included other identified local supplies, such as LADWP's planned water transfers and flows in the Los Angeles Aqueduct that are consistent with LADWP's UWMP, MWD's RUWMP average year demands would have been even lower than the member agencies cumulative demands.

Further reductions in MWD demand would occur if the "potential projects" identified in the member agencies UWMP's are implemented. These projects have become more cost-competitive as a result of MWD rate increases.
Figure 12

MWD RUWMP Demand on MWD, with Adjustments
Average Year

Figure 13

MWD RUWMP Demand on MWD, with Adjustments
Single Dry Year
8.0 Findings

From MWD’s 2000 RUWMP through its 2010 RUWMP, overall projected demand, and overall projected demands on MWD have decreased significantly due to conservation, significantly higher water rates and local water supply development over levels previously planned by MWD. Decreased demand generally and decreased demand specifically on MWD supplies has resulted in a "surplus" of supply during all existing supply capability and demand scenarios examined in MWD's RUWMP.

MWD projects greater firm demand in average years than its member agencies project in their UWMP's. This difference is due mainly to the fact that MWD did not consider member agency plans for significant projects such as the SDCWA, West Basin, and Long Beach seawater desalination projects and Los Angeles' planned water transfers. There is no explanation why MWD's 2005 RUWMP included 150,000 acre-feet per year of seawater desalination but did not include these supplies in its 2010 plan.

During the worst case single dry year scenario, MWD's member agency projections of MWD firm demand are slightly more than what MWD's RUWMP indicates. However, this may be explained by the fact that each member agency's single dry year demand may not occur concurrently. Each member has different demand patterns and uses, availability of local supplies, and in some cases weather characteristics that could impact demand on MWD. Therefore, peak single dry year demand may not necessarily occur in the same year for all 26 member agencies. Further, any difference could also be reduced, or eliminated, if member agencies implement some or all of the "potential projects" that are listed in their UWMPs.
For multiple dry years, the analysis shows that cumulative member agency projections (third year) are consistent with the average year in that the total projected MWD firm demand is less than MWD's projection for the multiple dry year scenario. In the multiple dry year scenario, some agencies report expected demand in each of the three "multiple" dry years, while others report only an annual figure for each year of the projected sequence.

Projected future MWD demands for all three scenarios would be reduced further by potential projects listed in the member agency UWMPs. Since UWMPs are not required to calculate wet year demands, no data is available to determine what impact wet years will have on MWD, but past trends show that MWD demands can decrease significantly during these periods. The fact that MWD member agencies are planning on purchasing less water in the future, on average, than MWD anticipates during normal (and likely wet) periods is likely to place upward pressure on MWD water rates over the longer term. Additional sales, if any, by MWD during a single dry year worst case scenario would be short lived and likely be offset by additional costs, thus having little impact on long term water rate trends when compared to impacts of lower sales during average or wet years.

Dry year peaking poses a significant planning issue for MWD and occurs to some extent in most of its member agencies. The volume of dry year peaking projected by MWD will have substantial economic impacts and require water rate increases associated with carrying additional water supplies, storage and capacity available to meet existing and future dry year peaking demands.

Tables 2-9, 2-10, and 2-11 in MWD's RUWMP state that the capability of MWD's existing programs can provide sufficient supplies to meet MWD demands in all years and all demand scenarios evaluated. Most of MWD's member agencies' UWMPs cite these tables and use them as the basis for concluding they have sufficient water supplies currently (and in many cases, surplus supplies) and will have sufficient water supplies in the future. Despite this surplus and dramatically reduced demand projections, MWD continues to pursue additional programs to increase its water supplies even further. The combination of reduced demands and increased spending on new water supply programs will continue to drive up the cost of MWD water.

Management of storage accounts plays a key role in both normal and dry years conditions, however, it is not possible to derive from MWD's RUWMP what assumptions it has made concerning the availability of water to put into storage or take during dry year conditions. MWD and its member agencies would benefit from a more detailed analysis of the expected availability of water for put and take into storage.

MWD's RUWMP also includes programs under development that will provide additional "potential surplus" supplies in the average, single dry, and multiple dry year scenarios. These programs include an interim Bay Delta measure, estimated to increase MWD's dry year supplies up to 487,000 acre-feet by 2015, and a more extensive Bay Delta solution that would increase its supply up to 628,000 acre-feet by 2025 (RUWMP Table A.3-7 at pages A.3-48 to A.3-52). These programs will result in substantial overdevelopment of water supplies for Southern California unless other projects under development by MWD, its member agencies and other water suppliers in Southern California are reduced or eliminated.
Further modeling should be done to factor in the anticipated timing and availability of Bay Delta supplies including an analysis of projects which may be deferred or eliminated in order to avoid stranded costs.

The cumulative total of water supplies being developed under the category of "Programs Under Development" for multiple dry years is as high 755,000 acre-feet, and for single dry years and average years as high as 1,036,000 and 1,051,000 acre-feet, respectively. This is exclusive of supplies not included in MWD’s RUWMP being developed by member agencies and other retail water suppliers not analyzed as part of this report.

If MWD’s future water sales are lower than it projects, further, unnecessary upward pressure will be placed on water rates. As MWD updates its long range finance plan and rate projections, MWD should again review the timing and emphasis of program expenditures. Given all of the changed circumstances, including reduced demands, escalating water rates and the economic downturn, MWD may wish to revisit its IRP and RUWMP now in order to enhance coordination with the plans of its member agencies and the other retail water suppliers that serve Southern California.
Appendix A

Summary of Member Agency Urban Water Management Plans
City of Anaheim

Overview

The City of Anaheim provides water to residents and businesses throughout its 49.3 square mile service area. The City receives water from two main sources: the Orange County Groundwater Basin, which is managed by the Orange County Water District and imported water from MWD. Groundwater is pumped from active wells located within the City and imported water is delivered through seven treated water connections and one untreated water connection from MWD.

Anaheim's 2010 UWMP lists its current population at 364,921 and project population to increase to 432,949 in the year 2035, an increase of 18.6%. Total Demand from the UWMP is expected to increase 16.1% over the same period, from 66,929 acre-feet in 2010 to 77,700 acre-feet in 2035. This increased demand will be met by both increased groundwater pumping and deliveries from MWD.

Existing and Projected Future Water Supply and Demand

Anaheim's demand projections were determined by an examination of its past water consumption by type of use or by customer classification and information provided by the Center for Demographic Research at California State University Fullerton.
Conservation and Per Capita Water Use

Anaheim is a member of an Orange County 20x2020 Regional Alliance, which is an effort to create flexibility in meeting the per capita water use reduction targets required under SBX7-7. The Regional Alliance selected as its calculation method the first DWR option, which require a simple 20% reduction from the baseline by 2020 and 10 percent reduction by 2015. The City's baseline was calculated at 201.6 GPCD. Its 2015 and 2020 targets are 181.4 and 161.2 GPCD, respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

City of Anaheim
Per Capita Water Use- Actual and Projected, GPCPD

Water Supply Reliability

Anaheim's plan indicates that future supplies are sufficient to meet its anticipated demands. The plan relies on MWD's RUWMP as the basis for this conclusion and includes MWD's RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

The plan includes a discussion of groundwater and its management within the basin. It discusses the OCWD Groundwater Replenishment System, put into operation in 2008, that provides a seawater barrier through injection wells and groundwater recharge for the City. According to the plan, Anaheim's groundwater production is expected to increase about 7 percent, or about 3,100 acre-feet. The City currently does not provide recycled water, but plans to provide up to 255 acre-feet per year beginning in 2015.

Anaheim's plan states that it intends to reduce its demand through aggressive water use efficiency programs. It also states that it has entered into an agreement to purchase GWRS water for use at the Canyon Power Plant, within its service area and includes these efforts in its demand assumptions. The plan lists desalination opportunities within MWDOC's service area, but the City does not plan to participate. The plan states that it could indirectly benefit from construction of a desalination plant because of the regional benefit that may be achieved.
City of Beverly Hills

Overview

The City of Beverly Hills, located in Los Angeles County and surrounded by the City of Los Angeles, provides water to city residents within its 5.69 square mile city limits and also to a portion of the City of West Hollywood. Water is obtained from two main sources: groundwater from four groundwater wells that pump water from the Hollywood Sub basin and treated water from MWD's Weymouth Treatment Plant through the Santa Monica Feeder. All of the City's raw groundwater is treated at the City's Reverse Osmosis Treatment Plant.

Beverly Hills' 2010 RUWP lists its water service area population at about 45,000 and projects a 5.75% increase to 47,587 by the year 2035. Total Demand from the UWMP is expected to increase 5.1 % over the same period, from 11,562 acre-feet in 2010 to 12,153 acre-feet in 2035. It plans to keep pumping in the basin fairly constant to help prevent overdraft and stay within its pumping rights, thus this increased demand will be met by increased deliveries from MWD.

Existing and Projected Future Water Supply and Demand

Beverly Hills' demand projections were determined by an examination of its past water consumption by type of use or by customer classification, future development and redevelopment. The City is considered to be "built-out" but as population increases slightly and water conservation measures continue to be implemented, the plan states that the City should experience moderate increases in its water consumption following an overall drop in water use from 2010 to 2020 due to SBX7-7 requirements.

City of Beverly Hills
Normal Year vs. Dry Year Demands, AFY

![City of Beverly Hills Normal Year vs. Dry Year Demands, AFY](image-url)
**Conservation and Per Capita Water Use**

Beverly Hills' per capita water use baseline is 277 and 284 GPCD depending on whether a 5 or 10 year baseline is used. Its Method 1 targets are 256 and 228 GPCPD for 2015 and 2020, respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

![City of Beverly Hills Per Capita Water Use- Actual and Projected, GPCPD](image)

**Water Supply Reliability**

Beverly Hills' UWMP indicates that future supplies are sufficient to meet its anticipated demands. According to its UWMP, available supplies exceed demand in all demand scenarios evaluated, based on MWD's RUWMP conclusion that it can meet all demands in all scenarios.

The plan states that the City "projects water demands within its service areas to remain fairly constant over the next 20 years due to minimal growth combined with water use efficiency measures. Due to this fact, the City does not have current plans for additional water supply projects other than regular maintenance and upgrades to its existing well, storage reservoirs and distribution pipelines." The plan does, however, mention that MWD is implementing water supply alternative strategies and lists several of these.
Overview

The City of Burbank is located approximately 12 miles north of downtown Los Angeles. The City covers 17 square miles of the eastern end of the San Fernando Valley. The City of Los Angeles lies to the north and west, and the City of Glendale to the south and east. Burbank's 2010 RUWP lists its current population at 108,469 and projects populations to increase 24.5% to 132,877 in the year 2035. Total normal year demand from the UWMP is expected to increase 17.6% over the same period. This increased demand will be met by a combination of increased recycled water use and groundwater pumping, and increased demand from MWD.

Existing and Projected Future Water Supply and Demand

According to its UWMP, Burbank's water use reached the required 20x2020 levels in 2010, although it notes that 2010 had mild weather which may have contributed to this reduction. Its FY 2011/12 financial plan projects five years of water sales which are less than its interim 2015 per capita target. Using available population projections, water use in the subsequent years to 2035 are estimated using the same GPCD rates as planned for 2015.

City of Burbank
Normal Year vs. Dry Year Demands, AFY
**Conservation and Per Capita Water Use**

Burbank evaluated its required SBX7-7 requirements using Method 1 and determine its per capita target to be 156 GPCD. The plan notes its interim target for 2015 to be 175 GPCD and notes that current usage is already below this target. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

![Graph showing projected per capita water use](image)

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**Water Supply Reliability**

Burbank's UWMP shows that future supplies are sufficient to meet its anticipated demands. In the past Burbank's groundwater supplies were reduced as a result of water quality issue caused by a number of factors including industrial releases. Together with others, Burbank embarked on a program to clean up groundwater supplies and make additional use of these supplies. The City is also implementing a storm water capture and infiltration program that will increase availability of groundwater supplies.

The plan notes that MWD estimates for Burbank's 2015 demand to be 27% greater than Burbank's 2015 estimate. According to the plan, MWD did not count future conservation from additional agency efforts to meet 20x2020 goals.

Burbank identified water exchanges, transfers and desalination as possible ways to develop additional supplies. While they do not have plans to do so, the UWMP plan states the City is supportive of these efforts by MWD or other entities. The City is looking at a chromium removal pilot study, expanded water recycling, and more aggressive conservation measures to provide additional supply or reduce demand further.
Overview

The Calleguas Municipal Water District, located in southern Ventura County, is a wholesaler water agency that distributes water to 19 local purveyors. Approximately three-quarters of Ventura County residents depend on CMWD for all or part of their water. The water supplied by CMWD represents approximately 73 percent of the total municipal and industrial water demand within its service area.

CMWD’s 2010 RUWP lists its current population at 632,399 and projects populations to increase to 730,788 in the year 2035, an increase of 15.6%. Total Demand from the UWMP is expected to increase 17.6% over the same period, from 171,776 acre-feet in 2010 to 202,160 acre-feet in 2035.

Existing and Projected Future Water Supply and Demand

CMWD’s UWMP notes that its projections for local supplies are substantially higher than the projections developed by MWD. The plan notes that “The lower local supply projections by MWD are related to MWD’s policy not to include future local supply projects until funding allocations, engineering, environmental approvals, and permitting requirements are substantially complete. CMWD purveyors, however, typically include future local supplies in their projections upon completions of feasibility studies.” This difference tends to decrease the amount of imported water that CMWD states it needs from MWD, whose estimates are about 15,000 to nearly 19,000 acre-feet higher (12 to 13 percent). For calculation purposes in the UWMP, Calleguas uses the local supply figures provided by its purveyors.

Calleguas MWD

Normal Year vs. Dry Year Demands, AFY

![Graph showing Normal Year vs. Dry Year Demands, AFY](image-url)
**Conservation and Per Capita Water Use**

The Plan notes that MWD prepared a paper in 2009 titled "Estimating the Water Savings Achieved with 20 percent by 2020 Compliance at the Member Agency Level." Using method 1, the percent reduction target would be 167 GPCD. While each purveyor's target may be different, the plan compared whether CMWD's projected water supplies and uses would satisfy this overall target level. The plan found that it would not, and states that "a combination of additional recycled water projects or conservation beyond that included in current projections will be required to meet the 2020 targets. " The plan states that CMWD and MWD intend to provide support for retail agencies efforts through technical assistance and continued financial assistance to the CMWD wholesale agency assistance program. According to the plan, a combination of additional increased recycled water use or additional conservation equal to 14.8% percent of total water use may be needed. For 2020, this amounts to a 27,925 acre-foot reduction in use. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

![Calleguas MWD Per Capita Water Use- Actual and Projected, GPCPD](image)

**Water Supply Reliability**

CMWD's UWMP indicated that future supplies are sufficient to meet its anticipated demands, even though it may need to reduce demands further to be in compliance with SBX7-7. CMWD's plan relies on MWD's RUWMP as the basis for this conclusion. Because MWD estimates that CMWD's demands for imported water are greater than the CMWD estimate (due to MWD's assumption regarding local supplies) and that MWD anticipated meeting imported water demands in all supply and demand conditions, CMWD's plan shows a surplus of supply between 5 and 16%, depending on the hydrologic condition and planning year.
Besides increasing local water through the planning horizon with brackish water desalination, conjunctive use and increased water reclamation, the CMWD plan briefly discusses DWR strategies to improve the reliability of supplies from the Bay-Delta, MWD strategies on both the SWP and Colorado River and its own strategies to increase conjunctive use, water treatment and salinity management. The plan states that the district benefits from water transfers through MWD, but does not plan to pursue these on its own.
Central Basin MWD

Overview

The Central Basin Municipal Water District is located in southeast Los Angeles County and encompasses approximately 227 square miles including 24 cities and several unincorporated areas. Its current population of 1,654,866 is expected to increase 9.4% by the year 2035 to 1,809,737 persons. At the same time, water use is expected to increase by 16.6% from 244,393 acre-feet in 2010 to 285,040 acre-feet in 2035. The 2035 figure includes replenishment deliveries. When replenishment deliveries are excluded, the overall increased use of water is 8.0%. Demand on MWD is expected to remain fairly constant during this period, with the exception of the 21,000 acre-feet per year of non-firm supplies that were not available in 2010. Aside from these non-firm supplies, increased demands will be met by recycled water and increased pumping of groundwater supplies from 2010 levels.

Existing and Projected Future Water Supply and Demand

CBMWD’s plan states that future demand forecasts were the result of historical water use analysis, population growth, commercial and residential development, all used in combination with the MWD-MAIN forecasting model. The UWMP demands are as follows:

![Central Basin MWD Normal Year vs. Dry Year Demands, AFY](image-url)
**Conservation and Per Capita Water Use**

CBMWD's UWMP states that per capita usage will remain relatively flat at 135 GPCD over the planning period. The plan discusses the South Coast hydrological region's target for 2015 as 154 GPCD and 2020 target of 137 GPCD. Since CBMWD has already reached 135 GPCD, the plan assumes it is in compliance with the SBX7-7 targets. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

![Central Basin MWD Per Capita Water Use - Actual and Projected, GPCPD](image)

**Water Supply Reliability**

CBMWD's reliability analysis assumes that its MWD Tier 1 supply allocation will be available during normal and single dry-year scenarios. CBMWD assumes that during the third year of a multiple dry year scenario, MWD supplies may be reduced 10 percent. Its reliability calculations reflect a slightly smaller decrease in MWD supplies (3.7%), but because of increased groundwater availability and recycled water, the plan still shows a surplus of available supplies during all hydrologic cases evaluated.

The plan includes a discussion of MWD supplies and efforts taken to improved reliability through its IRP. It also includes a discussion of pumping rights in the basin within its service area. The plan discusses Water Replenishment District's attempts to "define their agency as the public entity responsible for management of a conjunctive use program for the Central Groundwater Basin." It discusses the litigation that ensued and states that "Central Basin expects to roll out its Groundwater Storage Plan in early 2012." Presumably the UWMP does not include additional supplies that may be available to CBMWD from either WRD's efforts or CBMWD's future plans.

The plan states that it is the beneficiary of water transfers through MWD and that because of high costs and the fact that CBMWD is "a land locked" agency without direct access to the ocean, it is highly unlikely that it will build such a facility, but states that seawater desalination may provide water resources to others.
City of Compton

Overview

The City of Compton is located approximately six miles north of downtown Long Beach covering approximately 10.2 square miles. The Compton Municipal Water District retails water to approximately 80 percent of the City and private water companies provide service to the remaining residents. Water is obtained from two main sources: the Central Groundwater Basin and imported water from MWD. Groundwater is pumped from active wells located within the City and imported water is delivered through treated water connections from MWD.

Compton's 2010 RUWP lists its current population at 81,963 and projects populations to increase to 93,336 in the year 2030, an increase of 13.9%. Total Demand from the UWMP is expected to increase 7.6% over the same period, from 8,929 acre-feet in 2010 to 10,455 acre-feet in 2030. As its rights to pump water from the groundwater basin are fixed, this increased demand will be met by increased deliveries from MWD.

Existing and Projected Future Water Supply and Demand

Compton's demand projections were determined by an examination of its past water consumption by type of use or by customer classification. Water losses, estimated at 20% in 2010 were also included in overall projections.
**Conservation and Per Capita Water Use**

Compton's per capita water use is currently around 100 GPCPD and is therefore already meeting SBX7-7 requirements. Its base usage was calculated as 106 GPCPD and the City used Option 3, which is to achieve 95% of the applicable state hydrologic region target to determine its 2015 and 2020 target of 142 GPCPD. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

![City of Compton Per Capita Water Use - Actual and Projected, GPCPD](image)

**Water Supply Reliability**

Compton's UWMP indicates that future supplies are sufficient to meet its anticipated demands. While its UWMP Tables 5.4.5 and 5.4.6 show demand exceeding supply by up to 15 percent in dry and multiple dry years, the plan states that Central Basin and MWD can provide additional surplus supplies to the City to meet demands, when necessary. While these supplies may be available, the plan states that the City "is still committed to water conservation in single dry and multiple dry years to help preserve precious water reserves and supplies."

The plan states that the City does not distribute recycled water in its service area at this time, and has no plans to do so in the future. It states that this is because of "alternate priorities by the recycled water wholesaler within the service areas, the Central Basin Municipal Water District (CBMWD), and a lack of funds available." The plan identifies one potential customer with a demand of 42 acre-feet per year. The plan states that it receives benefits from MWD's water transfers and desalination programs but it has no plans to pursue such options on its own.
Eastern MWD

Overview

The Eastern Municipal Water District is located in western Riverside County, approximately 75 miles east of Los Angeles. The 555 square mile service area includes seven incorporated cities in addition to unincorporated areas of the County of Riverside. Eastern provides both water and sewer services to many, but not all of the areas it serves. It also provides wholesale water to three separate cities, two water companies, and two water districts including the Rancho California Water District. The population within EMWD's boundaries is 695,923 and is forecast to grow by 59.7% to 1,111,729 by the year 2035. Water use is expected to increase by 80.7% over the same period, from 159,408 acre-feet in 2010 to 288,100 acre-feet in 2035. Because 2010 was a year when MWD supplies were limited and water demands were lower than previous years, the increase in demand versus projected increase in population is somewhat distorted. According to its UWMP, the majority of this increase in water use is expected to be met by MWD, with increases in recycled water production offset by decreases in groundwater pumping.

Existing and Projected Future Water Supply and Demand

Eastern's demand projections "were developed using projections provided by the Riverside County Center for demographic research." According to the plan, "EMWD retail demand projections include the water savings needed to meet the Water Conservation Bill of 2007 requirements." The plan notes that the area is currently experiencing a slowdown in new development, but the area is only about 40 percent built out. EMWD tracks new developments using a special database. The UWMP demands are as follows:
Conservation and Per Capita Water Use

Eastern's UWMP includes calculations to meet SBX7-7 requirements. Its calculated baseline usage is 212 GPCD and method 2 is used to determine its 2105 target of 197.98 GPCD and 2020 target of 183.96 GPCD. To reduce its demands it plans to increase recycled water use and develop various conservation programs. The targets apply to the retail service areas; the wholesales areas may have different targets. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

Eastern MWD
Per Capita Water Use- Actual and Projected, GPCPD

Water Supply Reliability

Eastern's UWMP shows its water supplies as sufficient to meet its demands under all conditions evaluated. According to the plan, "The majority of EMWD's current and projected water supplies are imported through the MWD. In its 2010 RUWMP, MWD concluded that with the storage and transfers programs developed, MWD will have a reliable source of water to serve its member agencies' needs through 2035 during normal, historic single-dry and historic multiple-dry years. Unprecedented shortage will be addressed through the water supply allocation plan."

The plan states that Eastern's planned local supplies will supplement imported supplies and improve reliability for Eastern and the region. Eastern plans to expand a desalination program to desalt brackish water. The plan states that another desalter could be warranted, in addition to an indirect potable reuse project. These additional supplies are not included in supply projections. The plan also states that EMWD is proposing a targeted 30 percent reduction in outdoor demand and a 10 percent reduction in indoor demand by 2035. Presumably these reductions are not included in the demand projections. Eastern states that it is investigating opportunities for independent transfers and exchanges, but states that it cannot quantify these at this time.
Foothill MWD

Overview

The Foothill Municipal Water District is a wholesale agency that provides imported water to retail agencies located in the foothills of the San Gabriel Mountains in Los Angeles County. While FMWD is dependent on MWD for 100 percent of its water supply, most of its retail agencies have access to their own groundwater supplies. Currently, these agencies rely on about 60 percent of their supplies to come from FMWD.

The FMWD service area covers 21.66 square miles and overlies both the Raymond and Verdugo Groundwater Basins. FMWD’s 2010 RUWP lists its current population at 87,876 and projects populations to increase 16.1% to 102,003 in the year 2035. Total normal year imported demand listed the UWMP is expected to increase 25% over the same period, although this increase represents only the increase in imported water demands of the agencies that FMWD serves and not use of local supplies. The UWMP does not document or project local supply used within its service area.

Existing and Projected Future Water Supply and Demand

FMWD's future MWD demands are the accumulation of its retailer's estimated demands for imported water. Presumably this information came from the retailers as they would have the best local knowledge of historic water use trends, demographic, and land use trends within their boundaries. The UWMP demands and supply are as follows:

Foothill MWD
Normal Year vs. Dry Year Demands, AFY

![Graph showing normal vs. dry year demands from 2010 to 2035 for reclaimed, other local, and MWD water sources.](chart)
Conservation and Per Capita Water Use

Foothill's UWMP states that each of its retail agencies that are required to comply with SBX7-7 requirements have chose to do so individually. Using population data contained in the plan and average and dry year UWMP imported water forecasts, the per capita imported use is projected as follows:

Foothill MWD
Per Capita Water Use- Actual and Projected, GPCPD

Water Supply Reliability

Foothill's UWMP indicates that future supplies are sufficient to meet its anticipated demands, but relies heavily on MWD’s RUWMP as the basis for this conclusion. FMWD’s plan includes MWD’s RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

FMWD's plan assumes the current level of use of reclaimed water throughout the planning period. The plan does note, however that FMWD has initiated a Local, Reliable Water Supply Program (LRWSP) to reduce dependence on imported water through development of recycled water as well as integrating storm water capture and recharge with recycled water and water conservation throughout its service area. If implemented, the plan could increase recycled water from the current estimate of 120 acre-feet per year to up to 1,400 acre-feet per year.
City of Fullerton

Overview

The City of Fullerton provides water to residents and businesses throughout its 22.3 square mile service area. The City receives water from two main sources: the Lower Santa Ana River Groundwater Basin, which is managed by the Orange County Water District and imported water from MWD. Groundwater is pumped from active wells located within the City and imported water is delivered through six treated water connections from MWD.

Fullerton's 2010 RUWP lists its current population at 138,600 and projects population to increase to 153,613 in the year 2035, an increase of 10.8%. Total Demand from the UWMP is expected to increase 17.7% over the same period, from 27,860 acre-feet in 2010 to 32,792 acre-feet in 2035. This increased demand will be met by both increased groundwater pumping and deliveries from MWD.

Existing and Projected Future Water Supply and Demand

Fullerton’s demand projections were determined by an examination of its past water consumption by type of use or by customer classification and information provided by the Center for Demographic Research at California State University Fullerton.
**Conservation and Per Capita Water Use**

Fullerton is a member of an Orange County 20x2020 Regional Alliance, which is an effort to create flexibility in meeting the per capita water use reduction targets required under SBX7-7. Fullerton and members of The Regional Alliance selected as its calculation method the first DWR option, which requires a simple 20% reduction from the baseline by 2020 and 10 percent by 2015. The City's targets for 2015 and 2020 are 199.9 and 177.7 GPCD, respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

![City of Fullerton Per Capita Water Use - Actual and Projected, GPCPD](image)

**Water Supply Reliability**

Fullerton's UWMP indicates that future supplies are sufficient to meet its anticipated demands. Fullerton's plan relies on MWD's RUWMP as the basis for this conclusion and includes MWD's RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

The plan includes a discussion of groundwater and its management within the basin. It assumes the Basin Pumping Percentage will remain at 62% for the planning horizon. This percentage limits the amount of water Fullerton can pump to a percentage of its total use. Use of direct recycled water within Fullerton is expected to remain constant over the planning period, at 300 acre-feet per year. The plan states that Fullerton supports OCWD's effort to increase recycled water use though its recharge of the groundwater basins, but states that past efforts to explore other recycled water use is not cost effective or beneficial to Fullerton. It has no plans to use recycled water other than what is made available through groundwater recharge from OCWD. The plan lists potential desalination projects within Orange County and states that Fullerton has a non-binding letter of intent with Poseidon Resources for 2,500 acre-feet of supply from the proposed Huntington Beach Seawater Desalination Project, but does not include this project in its projections.
City of Glendale

Overview

The City of Glendale's Water and Power service area is located northeast of the City of Los Angeles and adjacent to both the City of Burbank on the west and the City of Pasadena on the east, encompassing a service area of 31.58 square miles. Glendale's UWMP lists its current population at 210,293 and projects population to increase to 244,357 in the year 2035, an increase of 16.2% overall. Total normal year demand from the UWMP is expected to increase 10.9% over the same period, from 26,448 acre-feet in 2010 to 29,323 acre-feet in 2035. This demand increase is expected to be met by additional local water and MWD supply sources.

Glendale's current water supplies include local groundwater from the San Fernando and Verdugo groundwater basins. Full use of these basins have been limited in recent years, due to water quality issues, however efforts to clean up contaminants and improve water quality and supply availability have allowed Glendale to increase production in recent years.

Existing and Projected Future Water Supply and Demand

Projections of water demand for Glendale were developed by examining historical water use by major category including single-family, multi-family, commercial, industrial, irrigation, and other. According the UWMP, "Water demand by category for the next 25 years was projected per the same percentage increase used in the supply calculations." UWMP projected future demands are as follows:

![City of Glendale Normal Year vs. Dry Year Demands](chart)

- **Reclaimed**: Green
- **Other Local**: Red
- **MWD**: Blue

This chart illustrates the comparison between normal and dry year demands for the years 2010, 2015, 2020, and 2035, showing the contribution of various supply sources such as reclaimed water, local sources, and MWD supply.
**Conservation and Per Capita Water Use**

Glendale evaluated its SBX7-7 requirements using Method 3 and determined its per capita target to be 137 GPCD and an interim target of 140.1 GPCD for 2015. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

**City of Glendale**

Per Capita Water Use - Actual and Projected, GPCPD

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<tr>
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**Water Supply Reliability**

Glendale's UWMP indicates that future supplies are sufficient to meet its anticipated demands. The plan relies on MWD's RUWMP as the basis for this conclusion with respect to imported water availability. According to the plan, "Glendale foresees very little change in available sources and amounts of water supply needed to meet water demands. In the next 25 years, we expect the same amount of supply from the San Fernando Basin. On the other hand, we will be utilizing the City's full water rights in the Verdugo Basin with the addition of new wells. Recycled water... will remain constant with very little addition." Imported water from MWD as stated in MWD's 2010 UWMP, "shows that the region can provide reliable water supplies under both the single driest year and the multiple dry year hydrologies."

The plan contains only a brief discussion of water transfers and desalination. Glendale may utilize short term transfers with neighboring agencies or cities. The plan states that it is supportive of MWD's efforts to secure out-of-region water transfers and (with other agencies') desalination.
Inland Empire Utilities Agency

Overview

The Inland Empire Utilities Agency provides a number of services within the western portion of San Bernardino County, including production of recycled water, sewage collection and treatment, distribution of imported and recycled water, desalination of groundwater supplies and disposal of industrial wastewater and brine. IEUA's service area encompasses approximately 242 square miles and serves an estimated population of 846,469. The population is expected to grow 38.9% by 2035. Water use within the service area for 2010 is reported as 243,664 acre-feet, and is expected to increase 28.9% to 314,136 acre-feet by 2035. This increased demand is expected to be met by a combination of increased recycled water use (32%), increased groundwater production (24%) and increased deliveries from MWD (44%).

Existing and Projected Future Water Supply and Demand

IEUA's UWMP compares its estimated total water use in the future with MWD projections derived from the MWD-MAIN model. According to the UWMP, overall IEUA member agency demand projections are very similar to MWD's projections, with IEUA's demands being approximately 1% higher than MWD's in the year 2035. The UWMP demands are as follows:

Inland Empire Utilities Agency
Normal Year vs. Dry Year Demands, AFY

![Diagram showing normal vs. dry year demands for 2010, 2015, 2020, and 2035.]
Conservation and Per Capita Water Use

IEUA’s UWMP includes calculations to meet SBX7-7 requirements, even though as an urban wholesale water supplier, is not required to do so. It calculated its baseline for the "IEUA territory" as 251 GPCD with 2015 and 2020 targets of 226 and 201 GPCD, respectively. The UWMP states that IEUA expects to meet or exceed both targets. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

Water Supply Reliability

IEUA shows its water supplies to exceed its demands under all conditions evaluated. IEUA assumes in its projections that during dry and multiple dry years demands will be reduced by 10%. The plan states that with implementation of MWD’s 2010 IRP, it will have the resources to supply IEUA customers with 100 percent of their imported water demands. The plan states that with IEUA’s dry year yield program in effect, several of IEUA’s member agencies will reduce their imported water demands, thus reducing demands on MWD. This reduction (to 62% of the normal demand) is reflected in the single and multiple dry years imported water projections. While the plan states overall demand projections by its members are consistent with the MWD MAIN overall projections, it does not state whether both MWD and IEUA account for reduced MWD demands in the dry and multi-dry year scenarios.

The plan discusses ways in which recycled water use will increase, how groundwater programs will increase dry year yield, and also how expansion of the Chino desalter will increase local supplies to IEUA agencies.
Las Virgenes MWD

Overview

Las Virgenes Municipal Water District is a retail water supplier in western Los Angeles County and comprises a 122 square mile area. The service areas includes the incorporated cities of Agoura Hills, Calabasas, Hidden Hills and Westlake Village as well as unincorporated portions of Los Angeles County.

LVMWD's 2010 RUWP lists its current population at 75,384 and projects populations to increase to 87,811 in the year 2035, an increase of 16.5%. Total normal water year demand from the UWMP is expected to increase 34.5% over the same period, from 24,721 acre-feet in 2010 to 33,252 acre-feet in 2035. Of this increase, approximately 53% is projected to be from increased recycled water use. LVMWD notes in its plan that 2010 demands are lower than its projected demand, citing temporary conditions including penalties, weather and recession.

Existing and Projected Future Water Supply and Demand

LVMWD uses SCAG populations as the basis for calculating future water demands. The plan states that historical per capita consumption rate was used in combination with the population projects to estimate future water demands. The plan states that this is the same method used in LVMWD's 2007 Integrated Water System Report.

Las Virgenes MWD
Normal Year vs. Dry Year Demands, AFY

![Graph showing normal versus dry year demands for Las Virgenes MWD with bars indicating reclaimed, other local, and MWD sources]
**Conservation and Per Capita Water Use**

LVMWD selected as its calculation method the first DWR option, which requires a simple 20% reduction from the baseline by 2010 and 10 percent by 2015. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

![Las Virgenes MWD Per Capita Water Use - Actual and Projected](image)

**Water Supply Reliability**

LVMWD’s UWMP indicated that future supplies are sufficient to meet its anticipated demands. LVMWD’s plan relies on MWD’s RUWMP as the basis for this conclusion. LVMWD’s plan assumes that since MWD’s plan lists a potential surplus of supply in normal, single dry year, and multiple dry years, the same percentage of potential surplus would be available to LVMWD for each of the years evaluated.

The plan includes a discussion of facilities LVMWD is planning to construct to enhance operations of its potable water system and expand its reclaimed water system. It also discusses a potential water transfer with Calleguas MWD to complete an intertie project to help fill its Las Virgenes reservoir. Presumably, this would not decrease overall MWD demands, as the water could likely come from MWD through Calleguas. Beyond the expansion of its reclaimed water system and use already included in its projections, no further potential reclaimed water or desalination projects are identified in the plan.
City of Long Beach

Overview

The City of Long Beach incorporates about 52 square miles in the southwest corner of the County of Los Angeles. Long Beach's UWMP lists its current population at 462,257 and projects population to increase to 508,233 in the year 2035, an increase of 9.9% overall. Total normal year demand from the UWMP is expected to increase 11.8% over the same period, from 63,448 acre-feet in 2010 to 70,929 acre-feet in 2035. This demand increase is expected to be met by additional local water, including recycling and seawater desalination. These additional supplies are also expected to decrease MWD demands from 22,237 acre-feet in 2010 to 11,929 acre-feet in 2035.

Long Beach's current water supplies include local groundwater from the West Coast Basin. According to the UWMP, Long Beach has a right to pump 32,692 acre-feet from the basin and has and will continue to fully utilize this supply.

Existing and Projected Future Water Supply and Demand

According to the plan, "Future water use projections were based on estimates developed in cooperation with MWDSC (which used input from LBWD and SCAG, feed that information into MWDSC's econometric model), LBWD's expectations for additional water conservation and the SBX7-7 urban water use target for LBWD." UWMP projected future demands are as follows:
Conservation and Per Capita Water Use

Long Beach evaluated its SBX7-7 requirements using Method 1 and determined its per capita target to be 107 GPCD. The plan states that Long Beach did not account in its calculations for indirect potable reuse water that is used, in part, to charge the West Coast Basin. It reserved the right to use these supplies for calculation purposes in the future. This is because the City feels it can meet the water use target without having to account for this additional reclaimed water usage at this time. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

City of Long Beach
Per Capita Water Use- Actual and Projected, GPCPD

Water Supply Reliability

Long Beach's UWMP indicates that future supplies are sufficient to meet its anticipated demands. The plan relies, in part, on MWD's RUWMP as the basis for this conclusion with respect to imported water availability. The plan includes calculations of its preferential right from MWD and determines that even if MWD had only 1,500,000 acre-feet of supply, its 2.54% of preferential rights would provide 38,100 acre-feet of supply, and would sufficiently meet its current or future expected MWD demand of 22,237 and 11,929 acre-feet, respectively.

Long Beach is expanding its use of reclaimed water and has incorporated a seawater desalination plant that would provide up to 10,000 acre-feet of water, beginning in 2025. While the desalination plant's production was incorporated into Long Beach's future supplies, the plan states "If the desalination facility is not put into production LBWD will continue to purchase the same amount [as current] from MWDSC. This will have no impact of MWDSC's ability to supply reliable water to LBWD, due to the relatively minuscule amount of water involved compared to the total MWDSC supply, and for the reasons stated above [preferential right] in the discussion of imported water." Long Beach has no plans to pursue water transfers, and "will rely on MWDSC to make that determination and pursue transfers / exchanges."
City of Los Angeles

Overview

The City of Los Angeles Department of Water and Power (LADWP) provides water and power service to its 4,100,260 residents. The service area encompasses 472 square miles and residential development constitutes over 51 percent of the total land use within the City. LADWP's population is expected to grow 8.9% to 4,467,560 and water use is expected to increase 18.4%, from 545,962 acre-feet in 2010 to 646,432 acre-feet in 2035. Because 2010 was a dry year for LADWP local supplies, normal water year MWD supplies are expected to decrease from 262,538 acre-feet in 2010 to 193,027 acre-feet in 2035. However, Los Angeles has large swings in its MWD water demand depending on availability of water from its Los Angeles Aqueduct (LAA). In a single dry year LADWP estimates its 2035 demand on MWD to be 432,687 acre-feet, up 224% over it normal year demand for the same year. At the same time LAA supplies would have been reduced for a normal year of 244,000 acre-feet to 46,940 acre-feet.

LADWP also has groundwater water supplies currently providing about 77,000 acre-feet plus recycled supplies of 6,700 acre-feet.

Existing and Projected Future Water Supply and Demand

LADWP developed a statistical conservation model that correlates total monthly water use in the City with population, weather, the presence of mandatory water conservation, and economic recessions. The model can be used to predict what the water demand would be under actual weather conditions, population growth, and the economy. The model was calibrated with past conservation, population, and econometric data. Using this model LADWP forecast water use as follows:
Conservation and Per Capita Water Use

LADWP evaluated its SBX7-7 requirements using Method 3 and determined its per capita baseline to be 154 GPCD. LADWP’s interim target is 146 GPCD and the 2020 target is 138 GPCD. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

![City of Los Angeles Per Capita Water Use - Actual and Projected, GPCPD](image)

Water Supply Reliability

LADWP’s UWMP indicates that future supplies are sufficient to meet its anticipated demands. The plan relies on MWD’s RUWMP as the basis for this conclusion with respect to imported water availability, but states that if imported water shortages should occur, then MWD’s Water Supply Allocation Plan would be implemented. The plan states that the WSAP was "designed to allocate supplies among its member agencies in a fair and efficient manner." It also states "whether LADWP can provide reliable water services to the residents of Los Angeles is highly dependent on MWD’s assurances of supply reliability. It further states that "the recent water supply shortage caused by dry weather and pumping restrictions in the Delta prompted the City to develop a more sustainable water supply portfolio."

LADWP plans to reduce its normal year purchases from MWD by half, from the five-year average of 52 percent of total demands between 2006 and 2010 to 24 percent by 2035. The dry year purchases would be nearly 63 percent. The reduction in normal year purchases would be accomplished by increasing recycled water use to 59,000 acre-feet (direct and indirect), annual water transfers of 40,000 acre-feet and increased groundwater usage to 110,000 acre-feet. The water transfers would be accomplished through an interconnection that LADWP is constructing between its LAA and the State water Project’s...
California Aqueduct. This connection will be owned by DWR and designated as an AVEK (Antelope Valley East Kern) interconnection. The plan states that MWD is involved in the agreement to provide consent for the transferred water to enter its service territory.

Under potential supplies, the plan states that storm water capture and reuse and groundwater replenishment could provide 25,000 acre-feet by 2035. LADWP's current water resources strategy does not include seawater desalination as a water supply.
Municipal Water District of Orange County

Overview

The Municipal Water District of Orange County is a regional water wholesaler and resource planning agency, managing all of Orange County's imported water supply with the exception of water imported to the cities of Anaheim, Fullerton, and Santa Ana. MWDOC serves imported water to 28 retail water agencies. MWDOC's 2010 RUWP lists its current population at 2,300,021 and projects populations to increase to 2,654,569 in the year 2035, an increase of 15.4%. Total Demand from the UWMP is expected to increase 17% over the same period, from 485,311 acre-feet in 2010 to 567,970 acre-feet in 2035.

Existing and Projected Future Water Supply and Demand

MWDOC requested that its member provide demand projections for the period 2015 to 2035, in five-year increments. The plan states that methodologies and assumptions underlying these projects vary from agency to agency, but all reflect the agencies knowledge of its service areas and "In most cases, the projections are correlated to the general plans prepared by the County of Orange or cities within MWDOC's service area."

MWDOC
Normal Year vs. Dry Year Demands, AFY

Conservation and Per Capita Water Use

MWDOC, in collaboration with all of its retail agencies as well as the Cities of Anaheim, Fullerton, and Santa Ana, created an Orange County 20x2020 Regional Alliance in an effort to create flexibility in meeting the per capita water use reduction targets required under SBX7-7. The Regional Alliance
selected as its calculation method the first DWR option, which require a simple 20% reduction from the baseline by 2010 and 10 percent by 2015. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

**MWDOC**

*Per Capita Water Use - Actual and Projected, GPCPD*

![Graph showing per capita water use](image)

**Water Supply Reliability**

MWDOC's UWMP indicates that future supplies are sufficient to meet its anticipated demands. MWDOC's plan relies on MWD's RUWMP as the basis for this conclusion. MWDOC's plan includes MWD's RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

The plan includes a discussion of groundwater within MWDOC service area, including the Lower Santa Ana River Basin, San Juan Basin, La Habra Basin, Main San Gabriel, and other basins within its service area. Overall groundwater production within MWDOC service areas is projected to increase from 220,052 acre-feet in 2010 to 251,754 acre-feet in 2035. This increase includes 22,000 acre-feet of production from water quality improvement projects. From 2005 to 2009 groundwater pumping remained relatively flat, from 222,633 in 2005 to 226,967 acre-feet in 2009, with a high of 251,510 acre-feet in 2008. In January 2008 Orange County Water District's Groundwater Replenishment System (GRWS) came on line with a production capacity of up to 70 million gallons per day. The GRWS is designed to provide water to reduce seawater barrier intrusion and replenishment supplies to the basin.

MWDOC's plan lists a number of future water supply projects and programs that, if eventually implemented, might further reduce demands on MWD. Among these is Irvine Ranch Water District's (IRWD's) 50,000 acre-feet of storage capacity at the Strand Ranch in Kern County. This project could provide additional dry year supplies to IRWD. Two seawater desalination opportunities are also identified including a 50 MGD (56,000 acre-feet per year) plant in Huntington Beach and MWDOC's
proposal for a 15 MGD plant (16,000 acre-feet per year) in conjunction with Laguna Beach County Water District.
City of Pasadena

Overview

The City of Pasadena's Water and Power (PWP) service area is located within the northwest portion of the San Gabriel Valley in Los Angeles County, encompassing approximately 23 square miles, and is slightly larger than the legal boundary of the City of Pasadena. PWP's UWMP lists its current population at 175,957 and projects population to increase to 199,562 in the year 2035, an increase of 13.7% overall. Total normal year demand from the UWMP is expected to decrease 5.1% over the same period, from 38,460 acre-feet in 2010 to 36,510 acre-feet in 2035. Because local supplies are projected to increase slightly (recycled water) during this period, the projected decrease in use would be from MWD supplies.

PWP's current water supplies include local groundwater from the Raymond Basin, surface water diversions, and purchases of imported water. Declining groundwater level have reduced PWP's pumping in the basin, and surface water is now used to augment these supplies.

Existing and Projected Future Water Supply and Demand

Projections of water demand for Pasadena were developed as part of a recently completed Water Integrated Resources Plan based on historical water use factors, projected demographics, and passive water conservation. Demands were projected to increase from 2010 to 2035 without future active water conservation. With this conservation, the UWMP demands are as follows:

City of Pasadena
Normal Year vs. Dry Year Demands, AFY

![Graph showing normal year vs. dry year demands for different periods and sources of water.]
Conservation and Per Capita Water Use

Pasadena evaluated its SBX7-7 requirements using Method 1 and determined its per capita target to be 168 GPCD and an interim target of 189 GPCD for 2015. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

City of Pasadena
Per Capita Water Use- Actual and Projected, GPCPD

Water Supply Reliability

Pasadena's UWMP indicates that future supplies are sufficient to meet its anticipated demands. The plan relies on MWD's RUWMP as the basis for this conclusion with respect to imported water availability. Pasadena's plan discusses how recycled water will be used in the future, eventually accounting for nearly 6 percent of demands. The plan contains a brief discussion of water transfers, but in the context of receiving water from adjoining agencies or leasing additional groundwater storage space in the Raymond Basin. With respect to desalinated water, the plan states there is the potential to develop a partnership with a regional agency to develop a facility and also mentions the San Diego County Water Authority's Camp Pendleton projects as one such opportunity.
San Diego County Water Authority

Overview

The San Diego County Water Authority is a regional water wholesaler and resource planning agency, that provides imported water to the western part of San Diego County. The remaining portion of the county is not within SDCWA’s service area, nor does it receive imported water. SDCWA provides water to its 24 member agencies, supplying between 75 to 95 percent of the region's needs depending on weather conditions and yield from surface, recycled, and groundwater projects.

SDCWA’s 2010 RUWP lists its current population at 3.2 million and projects populations to increase to 3,906,718 in the year 2035, an increase of 22.1 percent. Total Demand from the UWMP is expected to increase 39% over the same period, from 566,443 acre-feet in 2010 to 785,685 acre-feet in 2035. Like many MWD agencies, 2010 demands were well below average due to drought and water use restrictions. Average demands for the period 2005-2010 was 648,030 acre-feet. Using this figure, increased demand to 2035 is expected to be about 20 percent.

Existing and Projected Future Water Supply and Demand

SDCWA service area demands include both agricultural and municipal uses. According to its UWMP, Municipal and Industrial (M&I) uses currently constitute about 80 to 85 percent of regional water consumption, with the remaining 15 to 20 percent being agricultural demands. In the future agricultural demand is expected to be less, and increase demands are anticipated to be in the M&I category.

M&I demands are forecast using an econometric water demand model call CWA-MAIN that has been calibrated for the region and uses various inputs regarding housing population and other significant factors provided by the San Diego Association of Governments (SANDAG). Agricultural demands are forecast using data from past trends, forecasted future efficiencies and crop and land use patterns. SDCWA incorporated anticipated climate change impacts into its forecast, which tend to suggest that the region have slight increases in demand over base conditions through 2035, but could be greater beyond this planning horizon.
Conservation and Per Capita Water Use

In its UWMP, SDCWA used urban water use targets that were calculated by each of its member agencies to determine the regional demand reductions required by SBX7-7 for inclusion in the plan. This was done in order to "clearly reflect retail compliance" with SBX7-7. For agencies that had already reach compliance, additional water use reductions were set to zero and the remaining use reductions were subtracted from the baseline derived from the CWA-MAIN model. No additional reductions are required after 2020, and SDCWA’s 2025 to 2035 GPCD targets were set at agencies’ 2020 GPCD targets. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:
**Water Supply Reliability**

SDCWA's UWMP indicates that future supplies are sufficient to meet anticipated demands in normal and single dry years, but may be insufficient to meet its multiple dry years demands in certain instances. The potential shortages would be relatively mild and could occur by year 2015, be alleviated by the Carlsbad Desalination Project in 2016, and then begin to reoccur in by 2030 as demand and population increases. According to the plan, shortages could be up to 76,768 acre-feet (11 percent) in 2015 and up to 52,921 acre-feet (6 percent) in 2035. These potential shortages would be addressed through drought management actions.

The plan includes discussions of the SDCWA's water transfer with the Imperial Irrigation District (existing supply being ramped up to 2020), conservation of water through the lining of the All-American Canal (existing supply) and other projections such as the Carlsbad Desalination project being developed by Poseidon Resources Corporation. The region has also planned to increase use of reclaimed water and brackish water, increase use of its local and out of region groundwater storage, and is looking at additional seawater desalination at Camp Pendleton in northern San Diego County.
City of San Fernando

Overview

The City of San Fernando is located in the San Fernando Valley northwest of downtown Los Angeles and is bounded on all sides by the City of Los Angeles. The City’s total area is 2.42 square miles and overlies both the San Fernando and Sylmar groundwater basins.

San Fernando's 2010 RUWP lists its current population at 23,650 and projects populations to increase to 25,478 in the year 2035, an increase of 7.7%. Total normal year demand from the UWMP is expected to increase 14.3% over the same period, although this increase represents only 476 acre-feet because of the size of the City and its population. In 2010 San Fernando took no water from MWD, and projects only to use 476 acre-feet in 2035. San Fernando qualifies its projections of supply and demand, stating "[the tables for normal, dry year, and multiple dry years are] not intended to be an estimate of the City's actual groundwater production. The City may pump amounts different from its adjudicated right of 3,405 AFY based on leases to and from other agencies. The City may also overdraft up to 10% of this amount." The plan also states that actual demands are likely to be below the SBX7-7 limit of 136 GPCD in accordance with water efficiency trends in the City.

Existing and Projected Future Water Supply and Demand

San Fernando calculated its future demands based upon population forecast times 136 GPCD, which the UWMP states as less than its SBX7-7 target. Subject to the qualification shown above, the UWMP demands are as follows:

City of San Fernando
Normal Year vs. Dry Year Demands, AFY
Conservation and Per Capita Water Use

San Fernando evaluated its required SBX7-7 requirements using both Method 1 and Method 3 and determined its per capita target to be 141.5 GPCD. For planning water demand, it used 136 GPCD, lower that what is required. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

City of San Fernando
Per Capita Water Use, Actual and Projected, GPCPD

Water Supply Reliability

San Fernando's UWMP indicates that future supplies are sufficient to meet its anticipated demands, but relies heavily on MWD's RUWMP as the basis for this conclusion. San Fernando's plan assumes that since MWD's plan lists a potential surplus of supply in normal, single dry year, and multiple dry years that the same percentage of potential surplus would be available to it for each of the years evaluated.

San Fernando's UWMP lists supplies exceeding demands in all cased evaluated. In any given year, the plan lists its local supplies as constant through a normal, single dry, and multiple dry year. MWD supplies, on the other hand vary during these various supply conditions, but still exceed the UWMP estimated demand.

San Fernando's UWMP discusses its plan to construct a denitrification plant at one of its wells. This may allow the City to increase slightly its groundwater pumping, but its purpose appears mainly intended to improve water quality and operational flexibility.
City of San Marino

Overview

The City of San Marino is located in the San Gabriel Valley, approximately 10 miles northeast of downtown Los Angeles. The City's total area is 3.77 square miles, with a population (2010) of 13,147.

San Marino is served water by California American Water Company, which prepared its 2010 Urban Water Management Plan. The plan includes the City of San Marino as part of California American's San Marino service area, which also encompasses customers in the City of Alhambra, Arcadia, El Monte, Pasadena, Rosemead, San Gabriel, East Pasadena, and East San Gabriel. California American serves a population of approximately 55,558 people with its San Marino service area.

The City of San Marino's population has remained steady over the past 10 years, growing only slightly from 12,945 to its current population. It is not expected that significant increases will occur in the future. With California American's San Marino service areas, population is expected to increase 11.8 percent, from 55,558 to 62,103 in 2030. Water deliveries by California American is expected to increase from 10,064 acre-feet in 2010 to 11,901 acre-feet in 2030, an increase of 18.2 percent.

Because the California American UWMP includes areas served in addition to the City of San Marino, and includes areas service by other MWD member agencies, the future water demand for the purposes of this report must be assumed. This assumption should not impact the accuracy of this report because of the fact that San Marino's population is relatively small and not expected to grow. For the purpose of this report, future demand on MWD is estimated to be the average of the past five years, as follows:

<table>
<thead>
<tr>
<th>MWD Deliveries (AF) to the City of San Marino</th>
</tr>
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<tbody>
<tr>
<td>2006</td>
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<tr>
<td>1,208.6</td>
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</table>

<table>
<thead>
<tr>
<th>Assumed MWD Demand, Average, Dry, and Multiple Dry Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
</tr>
<tr>
<td>1,054.0</td>
</tr>
</tbody>
</table>
**Water Supply Reliability**

California American's UWMP indicates that future supplies are sufficient to meet its anticipated demands but relies, in part, on MWD's RUWMP as the basis for this conclusion. The plan contains MWD's Tables 2-9, 10, and 11 that show MWD has surplus supplies in each scenario condition and year that it evaluated.
City of Santa Ana

Overview

The City of Santa Ana provides water to residents and businesses throughout its 27 square mile service area. The City receives water from two main sources: the Lower Santa Ana River Groundwater Basin, which is managed by the Orange County Water District and imported water from MWD. Groundwater is pumped from active wells located within the City and imported water is delivered through seven treated water connections from MWD.

Santa Ana's 2010 RUWP lists its current population at 358,136 and projects populations to increase to 382,591 in the year 2035, an increase of 6.8%. Total Demand from the UWMP is expected to increase 7.6% over the same period, from 46,800 acre-feet in 2010 to 50,400 acre-feet in 2035. This increased demand will be met by both increased groundwater pumping and deliveries from MWD.

Existing and Projected Future Water Supply and Demand

Santa Ana's demand projections were determined by an examination of its past water consumption by type of use or by customer classification and information provided the Center for Demographic Research at California State University Fullerton.

City of Santa Ana
Normal Year vs. Dry Year Demands, AFY
Conservation and Per Capita Water Use

Santa Ana is a member of an Orange County 20x2020 Regional Alliance, which is an effort to create flexibility in meeting the per capita water use reduction targets required under SBX7-7. Most members of the Regional Alliance selected as its calculation method the first DWR option, which require a simple 20% reduction from the baseline by 2010 and 10 percent by 2015. With the assistance of MWDOC, the City chose option 3, which is to achieve 95% of the applicable state hydrologic region target. The City's targets for 2015 and 2020 are 118.5 and 108.9 GPCD, respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

City of Santa Ana
Per Capita Water Use- Actual and Projected, GPCPD

Water Supply Reliability

Santa Ana's UWMP indicates that future supplies are sufficient to meet its anticipated demands. Anaheim's plan relies on MWD's RUWMP as the basis for this conclusion and includes MWD's RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

The plan includes a discussion of groundwater and its management within the basin. It assumes the Basin Pumping Percentage will remain at 62% for the planning horizon. This percentage limits the amount of water the City can pump to a percentage of its total use. Use of direct recycled water within the City is expected to remain constant over the planning period, at 300 acre-feet per year. The plan states that the City supports OCWD's effort to increase recycled water use though its recharge of the groundwater basins. The plan lists potential desalination projects within Orange County, but does not include these projects in its projections.
City of Santa Monica

Overview

The City of Santa Monica’s service area is bordered by the Pacific ocean on the west, and the City of Los Angeles on the north, east and south. Santa Monica's 2010 RUWP lists its current population at 91,000 and projects virtually no growth, with a population of 92,124 in the year 2035. Total normal year demand reported in UWMP is expected to increase slightly, from 13,864 acre-feet in 2010 to 14,509 acre-feet in 2035. The majority of this demand increase is in recycled water. At the same time, MWD demand from Santa Monica is forecast to be zero, beginning in 2020 and throughout the remainder of the planning period. Increased groundwater production from the Santa Monica Basin accounts for this reduction in MWD demand. Santa Monica has a recycled dry weather urban runoff program that allow it to help eliminate contamination of Santa Monica Bay and capture and treat runoff for reuse in landscape irrigation and indoor plumbing.

Existing and Projected Future Water Supply and Demand

Santa Monica calculated its future demands based upon the population forecast times 140.6 GPCD. Subject to the qualification shown above, the UWMP demands are as follows:

City of Santa Monica
Normal Year vs. Dry Year Demands, AFY
Conservation and Per Capita Water Use

Santa Monica evaluated its required SBX7-7 requirements using both Method 1 and Method 3 and determined its per capita target to be 140.6 GPCD and used this figure for planning water demand. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

City of Santa Monica
Per Capita Water Use- Actual and Projected, GPCPD

Water Supply Reliability

Santa Monica's UWMP indicates that future supplies are sufficient to meet its anticipated demands, but relies heavily on MWD's RUWMP as the basis for this conclusion. Santa Monica assumes that since MWD's plan lists a potential surplus of supply in normal, single dry year, and multiple dry years that the same percentage of potential surplus would be available to Santa Monica for each of the years evaluated.

Santa Monica's UWMP discusses the potential to expand recycled water use beyond what is contained in the plan, but does not quantify the additional water quantity that may be available from such expansions. Because Santa Monica already plans to eliminate normal and dry year MWD deliveries, additional expansion would have no impact on MWD. The UWMP also states that graywater use could increase, and that storm water capture and seawater desalination are not being considered for Santa Monica.
Three Valleys MWD

Overview

The Three Valleys MWD is a wholesale water provider to cities and water districts within the Pomona Valley, Walnut Valley, and eastern portion of the San Gabriel Valley in Los Angeles County. The district encompasses approximately 133.3 square miles and a current population of 573,799. The UWMP projects population to increase to 712,264 in the year 2035, an increase of 24.1% overall. Total normal year demand from the UWMP is expected to increase 20.8% over the same period, from 127,621 acre-feet in 2010 to 154,144 acre-feet in 2035. The projected increase of over 26,000 acre-feet is expected to come mainly from increased MWD purchases (over 21,000 acre-feet) and increased recycled water usage (5,000 acre-feet), with local groundwater pumping remaining nearly constant.

Three Valleys members current water supplies include local groundwater from the Chino, San Gabriel, Puente, Six Basins, and Spadra groundwater basins. The region also receives captured surface water from San Gabriel, San Dimas, and San Antonio canyon watersheds that provide water through Covina Irrigating Company, Golden State Water Company, and the City of Pomona. Typically, surface water provides about 5 to 8% of the total water demand within the TVMWD service area.

Existing and Projected Future Water Supply and Demand

According to its UWMP, projections of future water demand for TVMWD were developed by MWD using its MWD MAIN Water Use Forecasting model, taking into consideration demographics, hydrology, and regulatory/environmental restrictions. The plan states that local resources from the TVMWD service area will be tapped first to provide initial supply to meet overall demand. The balance will be met with imported supplies through MWD. Future demands from the UWMP are as follows:

Three Valleys MWD
Normal Year vs. Dry Year Demands, AFY
Conservation and Per Capita Water Use

TVMWD's UWMP contains a brief description of SBX7-7 requirements, including the following: "On a regional basis, the baseline water demand is estimated to be 193 gallons per capita per day (GPCD). A 20 percent reduction would lessen this to 154 GPCD. Based on population projections for 2020, this reduction translates to approximately 27,500 AF of projects and programs to lessen local dependence on potable supplies. Achieving this will require additional local and regional investments in both conservation and recycled water. TVMWD will work with its retail member agencies to develop policies and programs to address individual water reduction targets."

Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

![Three Valleys MWD Per Capita Water Use - Actual and Projected, GPCPD](image)

Water Supply Reliability

TVMWD's plan indicates that it relies "primarily on the availability of MWD supplies to gauge reliability." The plan refers to MWD's RUWMP: "wherein MWD explains the measures it has taken to try and guard against shortages in imported supplies coming from the two primary sources [SWP and Colorado River]." The plan also refers to MWD's groundwater banking/storage agreements, surface water storage, and conservation programs. The plan also discusses groundwater and conjunctive use programs within its service areas, such as the Chino Basin Dry-Year Yield Program and TVMWD's cyclic storage account in the Main San Gabriel Basin.

The plan states that there are several "avenues" that TVMWD and its member agencies can take to improved long-term water supply reliability including conjunctive use, cyclic storage, groundwater recover, and additional resource development. Specific projects are listed that could, cumulatively, provide an annual 28,000 acre-feet of additional yield into the TVMWD service area.
City of Torrance

Overview

The City of Torrance's Torrance Municipal Water (TMW) service area is approximately 16.2 square miles and comprises about 78 percent of the land within the City limits. California Water Service provides water service to the remaining portion of the City.

Torrance's 2010 UWMP lists its current population within TMW at 113,500 and projects the population to increase to 116,610 in the year 2035, an increase of 2.7% overall. Total normal year demand from the UWMP is expected to decrease 2.7% over the same period, from 25,203 acre-feet in 2010 to 24,522 acre-feet in 2035. At the same time, MWD demand within TMW is shown in the UWMP to decrease from 16,471 acre-feet to 9,332 acre-feet. The decrease in MWD supply listed in the UWMP is a result of increased groundwater, brackish water and recycled water use. Torrance qualifies its projections of supply and demand, stating "[the tables for normal, dry year, and multiple dry years are] not intended to be an estimate of the City's actual supply. City may pump amounts different from its adjudicated right of 5,640 AFY based on leases & may expand its Desalter Facility. Additionally, imported supplies may or may not be reduced. [These tables are] also not intended to be a projection of the City's actual demand. Demand of 133 GPCD is a conservative estimate based on SDx7-7 limits. Actual demand is likely to be below 133 GPCD with water efficiency trends in the City."

TMW pumps its groundwater from the West Coast Basin and uses desalted groundwater produced by the Water Replenishment District's Robert W. Goldsworthy Desalter. It also purchases reclaimed water from West Basin MWD.

Existing and Projected Future Water Supply and Demand

Torrance calculated its future demands based on the population forecast times 133 GPCD, which the UWMP states is less than its SBX7-7 target. Subject to the qualification shown above, the UWMP demands are as follows:
Conservation and Per Capita Water Use

Torrance evaluated its required SBX7-7 requirements using both Method 1 and Method 3 and determined its per capita target to be 141.5 GPCD. For planning water demand, it used 133 GPCD, lower than what is required. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows, but it should be recognized that a portion of the water from the TWD Well #6 and the Goldsworthy Desalter may not necessarily be included in a GPCD calculation for SBX7-7 reporting purposes:
**Water Supply Reliability**

Torrance's UWMP indicates that future supplies are sufficient to meet its anticipated demands, but relies on MWD's RUWMP as the basis for this conclusion. Torrance's plan assumes that since MWD's plan lists a potential surplus of supply in normal, single dry year, and multiple dry years that the same percentage of potential surplus would be available to TMW for each of the years evaluated.

Torrance's UWMP lists supplies exceeding demands in all cases evaluated. In any given year, the plan lists its local supplies as constant through a normal, single dry year, and multiple dry years. MWD supplies, on the other hand, vary during these various supply conditions, but still exceed the UWMP estimated demand.

Torrance's UWMP discusses the potential to expand recycled water use and the Robert W. Goldsworthy Desalter. The plan does not quantify the additional water that may be available for such expansions. The plan also states that gray water use could increase, and that storm water capture and seawater desalination are not viable options for the TMW.
Upper San Gabriel Valley MWD

Overview

Upper San Gabriel Valley MWD (Upper District) is a wholesale water agency that supplies imported water from MWD and recycled water to its sub-agencies. Upper District is located within the San Gabriel Valley in Los Angeles County and overlies the "Main Basin." It service area is about 144 square miles and includes all or portions of 18 separate cities. The service area is largely urbanized consisting mainly of residential, light industrial, and commercial uses.

Upper District’s UWMP lists its current population at 903,000 and projects population to increase to 1,025,000 in the year 2035, an increase of 13.5% overall. Total normal year demand from the UWMP is expected to increase only 1.6% over the same period, from 163,101 acre-feet in 2010 to 165,747 acre-feet in 2035. This demand increase is expected to be met by increasing reclaimed water use. Imported water constitutes a relatively small percentage of usage within the Upper District service area, accounting for 22,633 acre-feet in 2010. Under "normal" conditions Upper District expects to use 3,000 acre-feet of MWD firm supplies and 16,000 to 25,000 acre-feet of non-firm MWD supplies. Upper District’s UWMP assumes that non-firm supplies would be available in both single dry and multiple dry year conditions, however for the purposes of this analysis single dry and multiple dry year MWD demands were treated as a firm demand, based on what occurred in 2010 when non-firm supplies were not available.

Existing and Projected Future Water Supply and Demand

According to the UWMP, Upper District is required to receive projections of water use from its retail urban water wholesalers. While not available for its plan, Upper District "reviewed projected values" based on historical trends and projected population. Upper District provides a relatively small percentage (14 to 16%) of the water in its service area. UWMP projected future demands are:
Conservation and Per Capita Water Use

Because Upper District is a wholesaler of water it is not required to set future per-capita targets. Presumably this is done individually or collectively by the 18 cities within the district. According to the plan, Upper District does have the ability to monitor water use within its boundaries. The district keeps track of local water use on a quarterly basis and imported water usage on a monthly basis. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:
**Water Supply Reliability**

Upper District's plan states "Metropolitan's 2010 RUWMP has concluded that the region can provide reliable water supplies under both the single driest year and the multiple dry year hydrologies for the next 20 years. The 2010 RUWMP prepared by Metropolitan, which is incorporated by reference, should be referred to for more details on the reliability of Metropolitan's imported water supplies. With regards to groundwater from the Main Basin, Upper District plan states "As noted in Chapter 3, the Main Basin is a well-managed groundwater basin and can ensure long-term reliability of water supply."

Upper District's plan discusses projects and facilities that will increase recycled water production from 6,000 acre-feet in 2010 to 15,000 acre-feet by 2030. Included is Phase IIA- Rosemead extension and Phase IIB- Industry Project, which will provide recycled water from the Whittier Narrows Water Reclamation Plant to a golf course, schools, parks, industrial complexes, and other projects."
West Basin MWD

Overview

The West Basin Municipal Water District is a wholesale water agency that provides potable water and recycled water to 17 cities, investor owned utilities, water districts and private companies. It covers approximately 185 square miles and a current population of 853,377. Its current population is expected to grow 10.5% by 2035 to 942,893. Water use is also expected to increase 8.1%, from 179,507 acre-feet in 2010 to 194,123 acre-feet in 2035. While overall water use is expected to increase, use of MWD supplies is expected to decrease over 30,000 acre-feet per year, due to increased direct use of recycled water, indirect use of recycled water and construction of a seawater desalination project. WBMWD's plan shows non-firm deliveries of up to 20,480 acre-feet per year from MWD in add demand scenarios, including single dry year and multiple dry years.

Existing and Projected Future Water Supply and Demand

West Basin completed a Demand Forecasting Model in 2010 for use in future water supply planning. The model produces various scenarios depending on the level of conservation activities, cost of water, economic recovery and weather changes. The UWMP demands are as follows:

![West Basin MWD Normal Year vs. Dry Year Demands, AFY](image)

Conservation and Per Capita Water Use

WBMWD's plan states that as a regional water supply wholesale area it is not required by SBX7-7 to report baseline targets, however it elected to do so as the reporting agency for a regional alliance formed by some of its customers. The base use was calculated for each member and ranges from 94.6
GPCD for California Water Service Hawthorne to 319.4 GPCD for Los Angeles County Water Works District #29. The combined base is 227.7 GPCD. Using method 1 the combined final targets are 194.1 and 160.5 GPCD for 2015 and 2020 respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:

**West Basin MWD**  
**Per Capita Water Use- Actual and Projected, GPCPD**

![Chart showing per capita water use from 2010 to 2035 for normal and dry years.](chart.png)

**Water Supply Reliability**

WBMWD's UWMP does not anticipate future shortages in any of the scenarios evaluated. The plan cites MWD's 2010 RUWMP as being able to meet imported water demands and "as a result, there will be no anticipated shortages under any dry year scenarios. It further states "Any shortfall in supplies will be met through imported water so long as MWD manages its supply and demand balance through its Water Surplus and Drought Management Plans."

The plan describes WBMWD's intent to increase recycled water use through both direct and indirect means. Recycled water use (direct and indirect) is expected to increase from 21,888 acre-feet per year in 2010 to 57,862 acre-feet in 2035. At the same time WBMWD anticipates seawater desalination to provide 21,500 acre-feet per year. While the seawater desalination plant is included in its UWMP, the plan states that the Ocean Water Desalination Demonstration Facility will test its viability. WBMWD is current preparing a Desalination Program Master Plan.
Western MWD

Overview

The Western Municipal Water District provides both wholesale and retail water service to western Riverside County. Western serves imported and local supplies on a wholesale basis to nine local area water purveyors, including a portion of the Rancho California Water District. Western also has a retail service area that it provides with similar water supplies. The general district (wholesale and retail areas combined) consists of 527 square miles and an estimated population of more than 860,000 people. Western’s retail service area population is currently 85,469 and is expected to grow by 88.4% to 161,016 by 2035. The UWMP does not give estimated population growth figures for the entire service area. Water use within the retail area is expected to grow from 24,741 acre-feet in 2010 to 46,968 acre feet in 2035, an increase of 89%. However, in 2009 water use in the retail area was roughly 30,000 acre-feet, so increased usage from 2009 to 2035 is expected to be about 56.6%. 2035 demand projects include additional conservation that is expected to occur.

Existing and Projected Future Water Supply and Demand

Western developed its Water Demand Forecast (WDF) model to help project future water demands within the retail and wholesale service area. The WDF is a GIS based application that uses general plan land use data to project water demands. Using the underlying land use information, the WDF takes user inputs on unit demands and growth rate assumptions to project demands from the year 2006 to buildout. The WDF model results were used as the basis of water projections for Western’s retail service area, and was offered to its member agencies during the UWMP public coordination process. However, a number of agencies preferred to develop their own demand projections and their results were incorporated into the Western UWMP. The UWMP demands are as follows:

Western MWD
Normal Year vs. Dry Year Demands, AFY

![Graph showing normal and dry year demands for Western MWD from 2010 to 2035]
**Conservation and Per Capita Water Use**

Western's UWMP states that it will need to reduce current water use demands in its retail areas by approximately 5 percent by 2015 and 10 percent by 2020. It is increasing its recycled water use by 730 acre-feet for a total of 1,500 acre-feet by year 2020. Western has a Water Use Efficiency Master Plan to accomplish its conservation goals. The plan describes the measures it will take to reach their goal and incorporates numerical conservation savings into its forecasted demand. The plan does not state specifically what its GPCD targets are or the method used to calculate reductions. However, the plan appears to reflect reduced per capita water usage in the future. Using population data and average year UWMP forecasts, the per capita use is projected as follows:

**Western MWD**

*Per Capita Water Use- Actual and Projected, GPCPD*

*Retail Area Only*

---

**Water Supply Reliability**

Western's UWMP shows water supplies exceeding demands under all conditions evaluated. The plan states "As part of its 2010 Regional Urban Water Management Plan, MWD evaluated the dependability of these [SWP and CRA] supplies and concluded that the combination of imported water and expanded local resource programs would ensure that its service area's demands would be met in the future. Western is relying on MWD's 2010 Regional Urban Water Management Plan to evaluate the reliability of imported supplies and the amount of imported water which will be available in the Western Service area."
Table 3-2 in Western’s UWMP shows Current and Planned Imported Water Supplies from MWD. The plan states "The demands documented in Table 3-2 have been provided to MWD and were included in MWD’s 2010 Regional Urban Water Management Plan." However, the demands shown in Table 3-2 far exceed Western’s Total Forecasted Demands, shown in the UWMP Table 2-15, as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2-15, Total Forecasted Demands on Western’s Water Supplies, Acre-Feet</td>
<td>118,640</td>
<td>124,042</td>
<td>134,684</td>
<td>145,164</td>
<td>156,231</td>
</tr>
<tr>
<td>Table 3-2, Current and Planned Imported Water Supplies from MWD, Acre-Feet</td>
<td>160,313</td>
<td>174,127</td>
<td>184,131</td>
<td>195,301</td>
<td>208,035</td>
</tr>
</tbody>
</table>

According to the UWMP, the supplies shown in Table 3-2 are expected to be available to Western in single-dry and multiple dry years. Because of this, the plan shows that supplies far exceed demands in each evaluated scenario. Using normal year demands from Table 5-1 and available local supplies the actual demand on MWD is expected to be as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
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<tr>
<td>Western UWMP Table 5-1 Normal Demands, Adjusted for Conservation, Acre-feet</td>
<td>118,640</td>
<td>127,879</td>
<td>138,982</td>
<td>149,922</td>
<td>161,450</td>
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<tr>
<td>MWD Demands, Calculated as Normal Demands less Available Local Supplies, Acre-feet</td>
<td>99,970</td>
<td>107,649</td>
<td>118,192</td>
<td>128,012</td>
<td>138,420</td>
</tr>
</tbody>
</table>

Despite the assumption that MWD will have more than sufficient supplies to meet demands, Western is developing additional reclaimed water supplies, participating in the expansion of the Arlington Desalter and expanding a groundwater banking program in the San Bernardino Basin Area (SBBA).
Appendix B

Member Agency Data from Urban Water Management Plans
<table>
<thead>
<tr>
<th>City of Anaheim</th>
<th>Normal Water Year</th>
<th>Single Dry Water Year</th>
<th>Multiple Dry Water Year</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Demands</td>
<td>66,929</td>
<td>72,180</td>
<td>73,345</td>
<td>75,645</td>
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<tr>
<td>Recycled Demand, Direct</td>
<td>-</td>
<td>220</td>
<td>255</td>
<td>255</td>
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<tr>
<td>Non-Firm, Replenishment</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total Demand</td>
<td>66,929</td>
<td>72,400</td>
<td>73,600</td>
<td>75,900</td>
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<tr>
<td>Water Supply</td>
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<tr>
<td>Imported, MWD non-firm</td>
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<tr>
<td>Imported, Other</td>
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<tr>
<td>Groundwater, Non-Potable</td>
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<td>Recycled, Indirect</td>
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<td>Brackish Water</td>
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<td>Seawater</td>
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<tr>
<td>Other</td>
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<tr>
<td>Conservation</td>
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<tr>
<td>Total Water Supply</td>
<td>66,929</td>
<td>72,400</td>
<td>73,600</td>
<td>75,900</td>
</tr>
</tbody>
</table>

| Per Capita Use GPCPD | 163.7 | 168.4 | 166.0 | 165.6 | 163.0 | 160.2 | 163.7 | 183.1 | 180.5 | 180.0 | 177.1 | 174.2 | 163.7 | 183.1 | 180.5 | 180.0 | 177.1 | 174.2 |
| Per Capita less Recycled/Non-Firm | 163.7 | 167.9 | 165.4 | 165.1 | 162.4 | 159.7 | 163.7 | 182.6 | 179.9 | 179.5 | 176.6 | 173.6 | 163.7 | 182.6 | 179.9 | 179.5 | 176.6 | 173.6 |

Notes
### City of Beverly Hills

#### Population Projection

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Population</td>
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<td>45,161</td>
<td>45,446</td>
<td>45,706</td>
<td>46,126</td>
<td>47,587</td>
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</table>

#### Water Demands

- **Firm Demand**: 11,562, 11,654, 11,786, 11,913, 12,036, 12,153, ..., 13,380
- **Recycled Demand, Direct**: 11,562, 12,610, 13,177, 13,212, 13,240, 13,380, ..., 13,380
- **Non-Firm, Replenishment**: 11,562, 12,610, 13,177, 13,212, 13,240, 13,380, ..., 13,380

#### Water Supply

- **Imported, MWD firm**: 10,473, 10,886, 11,113, 11,236, 11,353, 11,470, ..., 12,580
- **MWD Non-Firm**: 10,473, 10,854, 10,886, 11,113, 11,236, 11,353, ..., 12,580
- **Non-Firm, Replenishment**: 11,562, 12,610, 13,177, 13,212, 13,240, 13,380, ..., 13,380

#### Per Capita Water Use GPCPD

<table>
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<tr>
<th>Year</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
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<tbody>
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<td>Per Capita</td>
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<td>228.0</td>
<td>228.0</td>
<td>228.0</td>
<td>228.0</td>
<td>228.0</td>
</tr>
<tr>
<td>Per Capita less Recycled/Non-Firm</td>
<td>229.4</td>
<td>228.0</td>
<td>228.0</td>
<td>228.0</td>
<td>228.0</td>
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#### Notes

2010 Groundwater pumping for 2010 assumed to be the difference between MWD deliveries and demand from UWMP
City of Burbank

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<tr>
<td>Firm Demand</td>
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<td>17,750</td>
<td>18,481</td>
<td>19,141</td>
<td>19,779</td>
<td>20,391</td>
<td>17,769</td>
<td>17,750</td>
<td>18,481</td>
<td>19,141</td>
<td>19,779</td>
<td>20,391</td>
<td>17,769</td>
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<td>19,415</td>
<td>20,060</td>
<td>20,685</td>
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<td>2,100</td>
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<td>200</td>
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<td>Total Demand</td>
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<td>23,510</td>
<td>24,141</td>
<td>24,601</td>
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<td>25,651</td>
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<tr>
<td>Imported, MWD firm</td>
<td>7,852</td>
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<td>8,141</td>
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<td>8,415</td>
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<td>9,685</td>
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<tr>
<td>Total Water Supply</td>
<td>21,813</td>
<td>23,510</td>
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<td>24,875</td>
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<td>178.0</td>
<td>176.1</td>
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<td>137.0</td>
<td>137.0</td>
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Notes
## Calleguas MWD

**Population Projection**

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<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
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**Water Demands**

**Firm Demand**

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<th>Year</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>164,829</td>
<td>167,809</td>
<td>171,414</td>
<td>173,644</td>
<td>179,073</td>
<td>182,985</td>
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</tr>
</tbody>
</table>

**Recycled Demand, Direct**

<table>
<thead>
<tr>
<th>Year</th>
<th>6,947</th>
<th>12,009</th>
<th>17,273</th>
<th>18,457</th>
<th>19,091</th>
<th>19,175</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,212</td>
<td>12,275</td>
<td>17,531</td>
<td>18,716</td>
<td>19,351</td>
<td>19,437</td>
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</table>

**Non-Firm, Replenishment**

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>116,877</td>
<td>113,384</td>
<td>118,283</td>
<td>121,147</td>
<td>124,810</td>
<td>128,105</td>
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</tr>
</tbody>
</table>

**Total Demand**

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>171,776</td>
<td>179,818</td>
<td>188,687</td>
<td>192,121</td>
<td>198,164</td>
<td>202,160</td>
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**Water Supply**

**Imported, MWD firm**

<table>
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<tr>
<th>Year</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>116,877</td>
<td>113,384</td>
<td>118,283</td>
<td>121,147</td>
<td>124,810</td>
<td>128,105</td>
<td></td>
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</table>

**Imported, MWD non-firm**

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
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<tr>
<td>40,094</td>
<td>33,595</td>
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<td>30,345</td>
<td>31,495</td>
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**Groundwater, Potable**

<table>
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<tr>
<th>Year</th>
<th>7,068</th>
<th>7,931</th>
<th>7,734</th>
<th>8,132</th>
<th>8,790</th>
<th>9,326</th>
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<tbody>
<tr>
<td>7,615</td>
<td>7,928</td>
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**Surface Supply/Storage**

**Recycled, Direct**

<table>
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<tr>
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<th>17,273</th>
<th>18,457</th>
<th>19,091</th>
<th>19,175</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,212</td>
<td>12,275</td>
<td>17,531</td>
<td>18,716</td>
<td>19,351</td>
<td>19,437</td>
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</tr>
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**Brackish Water**

<table>
<thead>
<tr>
<th>Year</th>
<th>800</th>
<th>13,499</th>
<th>14,012</th>
<th>14,040</th>
<th>14,048</th>
<th>14,057</th>
</tr>
</thead>
<tbody>
<tr>
<td>800</td>
<td>13,515</td>
<td>14,065</td>
<td>14,090</td>
<td>14,116</td>
<td>14,143</td>
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</table>

**Seawater**

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<th>13,499</th>
<th>14,012</th>
<th>14,040</th>
<th>14,048</th>
<th>14,057</th>
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<tr>
<td>800</td>
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<td>14,098</td>
<td>14,142</td>
<td>14,188</td>
<td>14,217</td>
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**Total Local**

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<tr>
<th>Year</th>
<th>34,309</th>
<th>66,434</th>
<th>70,404</th>
<th>70,974</th>
<th>73,354</th>
<th>74,015</th>
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<tr>
<td>55,711</td>
<td>67,331</td>
<td>71,511</td>
<td>72,096</td>
<td>74,592</td>
<td>75,310</td>
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**Total Water Supply**

<table>
<thead>
<tr>
<th>Year</th>
<th>171,776</th>
<th>179,818</th>
<th>188,687</th>
<th>192,121</th>
<th>198,164</th>
<th>202,160</th>
</tr>
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<tr>
<td>176,548</td>
<td>189,960</td>
<td>194,689</td>
<td>198,843</td>
<td>206,556</td>
<td>211,547</td>
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</table>

**Per Capita Water Use (GPCPD)**

<table>
<thead>
<tr>
<th>Year</th>
<th>242.5</th>
<th>243.5</th>
<th>246.8</th>
<th>244.2</th>
<th>249.8</th>
<th>247.0</th>
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<tbody>
<tr>
<td>249.2</td>
<td>251.8</td>
<td>254.6</td>
<td>252.7</td>
<td>256.2</td>
<td>258.4</td>
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**Per Capita less Recycled/Non-Firm**

<table>
<thead>
<tr>
<th>Year</th>
<th>237.2</th>
<th>227.2</th>
<th>224.2</th>
<th>220.7</th>
<th>222.1</th>
<th>223.5</th>
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</thead>
<tbody>
<tr>
<td>239.0</td>
<td>235.2</td>
<td>231.7</td>
<td>228.9</td>
<td>232.2</td>
<td>234.7</td>
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</table>

**Notes**

1. Population Projections based on MWD/SCAG. Alternative projection is also shown in UWMP.
2. Local supply and imported demands are based upon CMWD projections. MWD projections are higher.
3. CMWD does not separate recycled demand from firm demand. CMUD subtracts local supplies to determine imported demand.
### Central Basin MWD

<table>
<thead>
<tr>
<th></th>
<th>Normal Water Year</th>
<th>Single Dry Water Year</th>
<th>Multiple Dry Water Year - Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population Projection</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$1,654,866</td>
<td>$1,689,064</td>
<td>$1,725,700</td>
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</tbody>
</table>

**Water Demands**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Demand</strong></td>
<td>244,393</td>
<td>265,825</td>
<td>281,470</td>
<td>283,355</td>
<td>285,040</td>
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<td>244,393</td>
<td>250,987</td>
<td>258,604</td>
<td>267,864</td>
<td>269,585</td>
<td>244,393</td>
<td>250,987</td>
<td>258,604</td>
<td>267,864</td>
<td>269,585</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Firm Demand</strong></td>
<td>63,443</td>
<td>56,525</td>
<td>59,870</td>
<td>61,755</td>
<td>63,440</td>
<td>...</td>
<td>63,443</td>
<td>72,360</td>
<td>72,360</td>
<td>72,360</td>
<td>72,360</td>
<td>63,443</td>
<td>69,711</td>
<td>69,711</td>
<td>69,711</td>
<td>69,711</td>
<td>69,711</td>
<td></td>
</tr>
<tr>
<td><strong>Recycled Demand, Direct</strong></td>
<td>6,632</td>
<td>7,980</td>
<td>11,000</td>
<td>16,000</td>
<td>16,000</td>
<td>...</td>
<td>6,632</td>
<td>12,900</td>
<td>17,900</td>
<td>17,900</td>
<td>17,900</td>
<td>6,632</td>
<td>12,900</td>
<td>17,900</td>
<td>17,900</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Water Supply**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Groundwater, Potable</strong></td>
<td>174,318</td>
<td>194,400</td>
<td>194,400</td>
<td>194,400</td>
<td>194,400</td>
<td>...</td>
<td>174,318</td>
<td>194,400</td>
<td>194,400</td>
<td>194,400</td>
<td>194,400</td>
<td>174,318</td>
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<td>194,400</td>
<td>194,400</td>
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<td>194,400</td>
<td></td>
</tr>
</tbody>
</table>

### Notes
1. Population Projections based on MWD/SCAG. Alternative projection is also shown in UWMP.
2. MWD Demand calculated from Table 2-4
3. MWD Demands based on MWD Tier 1 purchase order contract, per plan
4. MWD firm demand in normal years is MWD demand, less 21,000 replenishment
### City of Compton

<table>
<thead>
<tr>
<th></th>
<th>Normal Water Year</th>
<th>Single Dry Water Year</th>
<th>Multiple Dry Water Year - Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Projection</td>
<td>81,963</td>
<td>84,669</td>
<td>87,465</td>
</tr>
<tr>
<td>Water Demands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Demand</td>
<td>8,929</td>
<td>9,522</td>
<td>9,847</td>
</tr>
<tr>
<td>Recycled Demand, Direct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Firm, Replenishment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Demand</td>
<td>8,929</td>
<td>9,522</td>
<td>9,847</td>
</tr>
<tr>
<td>MWD Firm Demand</td>
<td>2,603</td>
<td>3,742</td>
<td>4,087</td>
</tr>
<tr>
<td>Water Supply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imported, MWD firm</td>
<td>2,803</td>
<td>3,742</td>
<td>4,087</td>
</tr>
<tr>
<td>Imported, Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groundwater, Potable</td>
<td>6,326</td>
<td>5,780</td>
<td>5,780</td>
</tr>
<tr>
<td>Surface Supply/Storage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycled, Direct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brackish Water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seawater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Conservation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Local</td>
<td>6,326</td>
<td>5,780</td>
<td>5,780</td>
</tr>
<tr>
<td>Total Water Supply</td>
<td>9,129</td>
<td>9,484</td>
<td>9,798</td>
</tr>
</tbody>
</table>

**Per Capita Water Use GPCPD**
- 97.3 100.0 100.0 100.0 100.0 100.0 97.3 100.4 100.5 100.5 100.4 100.4 97.3 101.5 101.2 101.5 101.5 101.5
- 97.3 100.0 100.0 100.0 100.0 100.0 97.3 100.4 100.5 100.5 100.4 100.4 97.3 101.5 101.2 101.5 101.5 101.5

**Notes**
- Population, Supply and Demand for 2035 is 2030 data.
- Supplies for Dry and Multiple Dry are listed as same for average year. UWMP states that additional MWD surplus water would be available, although conservation would be in effect.
### Eastern MWD

<table>
<thead>
<tr>
<th></th>
<th>Normal Water Year</th>
<th>Single Dry Water Year</th>
<th>Multiple Dry Water Year</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Projection</td>
<td>695,923</td>
<td>779,857</td>
<td>870,603</td>
<td>960,053</td>
</tr>
<tr>
<td>Water Demands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Demand</td>
<td>116,561</td>
<td>170,000</td>
<td>191,400</td>
<td>211,400</td>
</tr>
<tr>
<td>Recycled Demand, Direct</td>
<td>41,500</td>
<td>43,900</td>
<td>50,000</td>
<td>53,900</td>
</tr>
<tr>
<td>Non-Firm, Replenishment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Demand</td>
<td>158,061</td>
<td>213,900</td>
<td>241,400</td>
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<tr>
<td>MWD Firm Demand</td>
<td>88,391</td>
<td>149,300</td>
<td>170,700</td>
<td>190,700</td>
</tr>
<tr>
<td>Water Supply</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imported, MWD Firm</td>
<td>88,391</td>
<td>149,300</td>
<td>170,700</td>
<td>190,700</td>
</tr>
<tr>
<td>Imported, Other</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Surface Supply/Storage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycled, Direct</td>
<td>41,500</td>
<td>43,900</td>
<td>50,000</td>
<td>53,900</td>
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<tr>
<td>Brackish Water</td>
<td>5,787</td>
<td>7,500</td>
<td>7,500</td>
<td>7,500</td>
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<tr>
<td>Sea water</td>
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<td></td>
</tr>
<tr>
<td>Other Conservation</td>
<td></td>
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<td></td>
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<tr>
<td>Total Local</td>
<td>69,670</td>
<td>64,600</td>
<td>70,700</td>
<td>74,600</td>
</tr>
</tbody>
</table>

### Notes
- 2010 Supply figures from MWD and Table 3.1
- Population is for entire service area. Per capita is calculated based on retail area.
- All figures included sales to others
- 2010 GW figures calculated
### Foothill MWD

#### Normal Water Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Population Projection</th>
<th>Water Demands</th>
<th>Non-Firm, Replenishment</th>
<th>Total Demand</th>
<th>MWD Firm Demand</th>
<th>Water Supply</th>
<th>Per Capita Water Use GPCPD</th>
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<tbody>
<tr>
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<tr>
<td></td>
<td>87,876</td>
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<td>10,194</td>
<td>10,090</td>
<td>10,194</td>
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<td></td>
<td>12,779</td>
<td>12,066</td>
<td>12,779</td>
<td>112.6</td>
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<tr>
<td></td>
<td>98,482</td>
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<td></td>
<td>13,432</td>
<td>12,362</td>
<td>13,432</td>
<td>112.5</td>
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<tr>
<td></td>
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<td>14,094</td>
<td>12,735</td>
<td>14,094</td>
<td>112.5</td>
</tr>
</tbody>
</table>

#### Single Dry Water Year

<table>
<thead>
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<th>Water Demands</th>
<th>Non-Firm, Replenishment</th>
<th>Total Demand</th>
<th>MWD Firm Demand</th>
<th>Water Supply</th>
<th>Per Capita Water Use GPCPD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>87,876</td>
<td></td>
<td></td>
<td>10,194</td>
<td>10,090</td>
<td>10,194</td>
<td>103.6</td>
</tr>
<tr>
<td></td>
<td>90,538</td>
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<td>12,126</td>
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<td>12,126</td>
<td>112.7</td>
</tr>
<tr>
<td></td>
<td>95,833</td>
<td></td>
<td></td>
<td>12,779</td>
<td>12,066</td>
<td>12,779</td>
<td>112.6</td>
</tr>
<tr>
<td></td>
<td>98,482</td>
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<td>13,432</td>
<td>12,362</td>
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<td></td>
<td>14,094</td>
<td>12,735</td>
<td>14,094</td>
<td>112.5</td>
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</tbody>
</table>

#### Multiple Dry Water Year - Year 3

<table>
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<th>Year</th>
<th>Population Projection</th>
<th>Water Demands</th>
<th>Non-Firm, Replenishment</th>
<th>Total Demand</th>
<th>MWD Firm Demand</th>
<th>Water Supply</th>
<th>Per Capita Water Use GPCPD</th>
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Notes:
- Population Provided by member retail agencies.
- Recycled water shown is produced by LA County San and delivered to golf course.
### City of Fullerton

#### Water Demands

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<tr>
<th></th>
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<tr>
<td><strong>Non-Firm, Replenishment</strong></td>
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<tr>
<td><strong>Total Demand</strong></td>
<td>27,860</td>
<td>32,305</td>
<td>32,881</td>
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<tr>
<td><strong>MWD Firm Demand</strong></td>
<td>10,587</td>
<td>12,276</td>
<td>12,495</td>
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<td>12,495</td>
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<tr>
<td><strong>Imported, MWD non-firm</strong></td>
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<tr>
<td><strong>Imported, Other</strong></td>
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</tr>
<tr>
<td><strong>Groundwater, Potable</strong></td>
<td>17,273</td>
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<td>20,386</td>
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<tr>
<td><strong>Surface Supply/Storage</strong></td>
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<td><strong>Recycled, Direct</strong></td>
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<td><strong>Recycled, Indirect</strong></td>
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<td><strong>Brackish Water</strong></td>
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<tr>
<td><strong>Seawater</strong></td>
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<td><strong>Other</strong></td>
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<td><strong>Conservation</strong></td>
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#### Notes
### City of Glendale

#### Normal Water Year

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<td>230,293</td>
<td>236,797</td>
<td>244,188</td>
<td>251,984</td>
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#### Water Demands

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<td>27,536</td>
<td>27,661</td>
<td>24,786</td>
<td>28,070</td>
<td>28,153</td>
<td>28,280</td>
<td>28,412</td>
<td>28,541</td>
<td>24,786</td>
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<td>28,280</td>
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<td>28,541</td>
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#### Total Demand

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<td>17,755</td>
<td>17,890</td>
<td>18,025</td>
<td>18,162</td>
<td>16,550</td>
<td>18,498</td>
<td>18,637</td>
<td>18,776</td>
<td>18,916</td>
<td>19,056</td>
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</table>

#### Water Supply

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<tr>
<td>Surface Supply/Storage</td>
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<td>1,662</td>
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<tr>
<td>MWD Firm Demand</td>
<td>16,550</td>
<td>17,620</td>
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<td>18,162</td>
<td>16,550</td>
<td>18,498</td>
<td>18,637</td>
<td>18,776</td>
<td>18,916</td>
<td>19,056</td>
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#### Total Local

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#### Per Capita Water Use (GPCPD)

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<td>115.3</td>
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<td>110.3</td>
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<td>105.5</td>
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<td>101.1</td>
<td>105.2</td>
<td>115.6</td>
<td>112.1</td>
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<td>115.6</td>
<td>112.1</td>
<td>108.9</td>
<td>106.4</td>
<td>104.3</td>
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### Notes

- MWD Demand shown is from available MWD supplies in RUWMP. These figures are less than MWD projections as pointed out in Plan.
- MWD Demand could be less, if City uses its local supplies to the extent they are available.
<table>
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<th>Multiple Dry Water Year - Year 3</th>
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<td>846,409</td>
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<td>981,651</td>
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<td>Water Demands</td>
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<tr>
<td>Recycled Demand, Direct</td>
<td>17,298</td>
<td>28,865</td>
<td>31,662</td>
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<td>Non-Firm, Replenishment</td>
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<tr>
<td>MWQ Demand from UWMP</td>
<td>54,934</td>
<td>80,556</td>
<td>81,641</td>
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<tr>
<td>Water Supply</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Imported, MWQ firm</td>
<td>54,934</td>
<td>80,556</td>
<td>81,641</td>
</tr>
<tr>
<td>Imported, MWQ non-firm</td>
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<td></td>
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</tr>
<tr>
<td>Surface Supply/Storage</td>
<td>25,652</td>
<td>28,490</td>
<td>28,490</td>
</tr>
<tr>
<td>Recycled, Direct</td>
<td>17,298</td>
<td>28,865</td>
<td>31,662</td>
</tr>
<tr>
<td>Recycled, Indirect</td>
<td>7,208</td>
<td>16,028</td>
<td>20,000</td>
</tr>
<tr>
<td>Brackish Water-CDA</td>
<td>14,737</td>
<td>17,733</td>
<td>17,733</td>
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<tr>
<td>Seawater</td>
<td>7,208</td>
<td>16,028</td>
<td>18,729</td>
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<tr>
<td>Total Local</td>
<td>195,802</td>
<td>274,809</td>
<td>273,098</td>
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</table>

| Per Capita Water Use GPCPD   | 257.0| 263.9| 244.1| 242.2| 238.8| 238.5| 257.0| 237.5| 219.7| 218.0| 213.1| 214.6| 257.0| 237.5| 219.7| 218.0| 213.1| 214.6|
| Per Capita less Recycled/Non-Firm | 238.7| 235.9| 215.4| 212.8| 208.9| 207.4| 238.7| 209.5| 190.9| 188.5| 183.2| 183.6| 238.7| 206.7| 188.1| 185.6| 180.3| 180.5|

Notes:
- Recycled water direct use from table 3-15
- Recycled, indirect includes recharge potential
- Other includes balance of recycled supply available
- Demand figures include slight ag usage
### Las Virgenes MWD

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<th>Normal Water Year</th>
<th>Single Dry Water Year</th>
<th>Multiple Dry Water Year - Year 3</th>
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<td>2020</td>
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#### Water Demands

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<th>2015</th>
<th>2020</th>
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<td>2035</td>
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<td></td>
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<td>2020</td>
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<td>2025</td>
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<td>2035</td>
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#### Non-Firm, Replenishment

<table>
<thead>
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<th>Total Demand</th>
<th>24,721</th>
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<td>23,951</td>
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<td>22,787</td>
<td>23,504</td>
<td>24,190</td>
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</table>

#### Water Supply

| Imported, MWD Firm | 20,199            | 41,675                | 43,406                             |
|                    | 46,941            | 45,163                | 43,783                             |

#### Conservation

<table>
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<th>Total Local</th>
<th>4,522</th>
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#### Per Capita Water Use GPCPD

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<th>315.0</th>
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<td>326.8</td>
<td>338.0</td>
<td>338.1</td>
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#### Notes

- Population Projections by SCAG
- MWD supply vs. MWD demand calculated by using percentages on LVMWD table 7.9
- Firm Demand includes recycled water
- Conservation shown is from Table 5.5
### City of Long Beach

#### Population Projection

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<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
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<td>498,686</td>
<td>508,233</td>
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</tbody>
</table>

#### Water Demands

- **Firm Demand**
  - 2010: 56,892
  - 2015: 57,520
  - 2020: 57,546
  - 2025: 57,551
  - 2030: 56,977
  - 2035: 56,929

- **Recycled Demand, Direct**
  - 2010: 6,556
  - 2015: 10,100
  - 2020: 11,300
  - 2025: 13,400
  - 2030: 13,700
  - 2035: 14,000

#### Non-Firm, Replenishment

- **Total Demand**
  - 2010: 63,448
  - 2015: 67,620
  - 2020: 68,846
  - 2025: 70,951
  - 2030: 70,677
  - 2035: 70,929

#### Water Supply

- **Imported, MWD Firm**
  - 2010: 22,237
  - 2015: 24,520
  - 2020: 24,046
  - 2025: 18,551
  - 2030: 17,477
  - 2035: 11,929

- **Imported, MWD Non-firm**
  - 2010: 6,556
  - 2015: 10,100
  - 2020: 11,300
  - 2025: 13,400
  - 2030: 13,700
  - 2035: 14,000

- **Groundwater, Potable**
  - 2010: 34,655
  - 2015: 33,000
  - 2020: 33,500
  - 2025: 34,000
  - 2030: 34,500
  - 2035: 35,000

- **Surface Supply/Storage**
  - **Recycled, Direct**
    - 2010: 6,556
    - 2015: 10,100
    - 2020: 11,300
    - 2025: 13,400
    - 2030: 13,700
    - 2035: 14,000
  - **Seawater**
    - 2010: 5,000
    - 2015: 5,000
    - 2020: 10,000
    - 2025: 3,000
    - 2030: 5,000
    - 2035: 5,000

Note: Supplies equal demands.
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<th>City of Los Angeles</th>
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<th>Multiple Dry Water Year - Year 3</th>
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<tr>
<td>Total Demand</td>
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<td>624,740</td>
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<td>218,040</td>
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<tr>
<td>Imported, MWD firm</td>
<td>263,827</td>
<td>248,120</td>
<td>218,040</td>
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<td>Imported, MWD non-firm</td>
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<td>Groundwater, Potable</td>
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<td>Surface Supply/Storage</td>
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<td>Potential Supplies</td>
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<td>Stormwater capture Increase GW</td>
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<td>Replenishment Demand is for recycled water</td>
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<tr>
<td>MWD purchases would be reduced by additional supplies</td>
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### MWDOC

#### Population Projection

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<th>Year 3</th>
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#### Water Demands

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#### Non-Firm, Replenishment

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<th>Year 3</th>
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<tbody>
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<td>2020</td>
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<td>2025</td>
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#### Water Supply

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#### Total Water Supply

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#### Per Capita Water Use GPCPD

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#### Per Capita less Recycled/Non-Firm

<table>
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<th>Year</th>
<th>Normal Water Year</th>
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<th>Multiple Dry Water Year</th>
<th>Year 3</th>
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#### Notes

- Per Capita Water Use GPCPD
- Per Capita less Recycled/Non-Firm

Page 271 of 494
<table>
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<tr>
<th>City of Pasadena</th>
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<tr>
<td>175,957</td>
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<td>185,640</td>
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**Water Demands**

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<tr>
<th>Firm Demand</th>
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**Water Supply**

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<th>MWD non-firm</th>
<th>Non-Firm, Replenishment</th>
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<tr>
<td>21,149</td>
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**Notes**

Other supply consists of Planned Stormwater Harvesting.
### Population Projection

<table>
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<th>Year</th>
<th>Normal Water Year</th>
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<th>Multiple Dry Water Year</th>
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### Water Demands

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<td><strong>Recycled Demand, Direct</strong></td>
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<tr>
<td><strong>Non-Firm, Replenishment</strong></td>
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### Total Demand

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<td>566,443</td>
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<tr>
<td>2015</td>
<td>647,285</td>
<td>687,520</td>
<td>718,458</td>
</tr>
<tr>
<td>2020</td>
<td>675,089</td>
<td>718,458</td>
<td>718,458</td>
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<tr>
<td>2025</td>
<td>717,995</td>
<td>764,731</td>
<td>803,930</td>
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<td>2030</td>
<td>753,619</td>
<td>839,016</td>
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<tr>
<td>2035</td>
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### Water Supply

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<tbody>
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<td><strong>Imported, MWD firm</strong></td>
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<td><strong>Imported, Other</strong></td>
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### Total Water Supply

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<tbody>
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<td>2015</td>
<td>647,285</td>
<td>687,520</td>
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<td>2020</td>
<td>675,089</td>
<td>718,458</td>
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<td>2025</td>
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### Per Capita Water Use

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### Notes

- Groundwater Recovery shown as brackish water
- Other imported includes water transfers from MWD
- Brackish water for 2010 assumed same as 2015
### City of San Fernando

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**Notes**

2010 figures are for 2009.
City of San Marino

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Per Capita Water Use (GPCPD)
Per Capita less Recycled/Non-Firm

Notes
## City of Santa Ana

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### Water Demands

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### Per Capita Water Use GPCPD

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### Per Capita less Recycled/Non-Firm

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### Notes

- Per Capita Water Use GPCPD
- Per Capita less Recycled/Non-Firm
### City of Santa Monica

#### Water Demands

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#### Water Supply

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### Per Capita Water Use

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Notes:
- Population projections from MWD IRP update
- Recycled Demand and Supply is "Recycled Dry Weather Urban Runoff"
- Supply exceeds demand-demand largely met through gw rather than MWD
- GW demand exceeds supply, according to table 5.4
- UWMP calls for reducing MWD to zero in most years- MWD is a backup supply
### Three Valleys MWD

#### Population Projection

|-------|------|------|------|------|------|------|------|------|------|------|------|------|

#### Water Demands

<table>
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<td>144,690</td>
<td>148,082</td>
<td>151,772</td>
<td>154,144</td>
<td>128,127</td>
<td>137,362</td>
<td>145,358</td>
<td>149,629</td>
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<td>72,343</td>
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<td>81,034</td>
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<td>60,826</td>
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<td>Total Water Supply</td>
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### Notes
- Population Projections from SCAG and SGV Council of Governments
- Conservation is 1990 base year
- Retail Ag is included in firm demand
- Groundwater and Groundwater Recover are combined
## City of Torrance

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<thead>
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<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
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<td>20,882</td>
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<td>21,950</td>
<td>22,604</td>
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<td>7,150</td>
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<td>27,532</td>
<td>28,559</td>
<td>29,100</td>
<td>28,754</td>
<td>25,203</td>
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<td>27,532</td>
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<td>20,967</td>
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<td>237.5</td>
<td>241.6</td>
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<td><strong>Per Capita less Recycled/Non-Firm</strong></td>
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<td>186.1</td>
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<td>Desalter supply will be fully utilized to meet demand</td>
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<td>Reclaimed supply will be fully utilized to meet reclaimed demand</td>
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<td>Imported supply is greater than imported demand</td>
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### Water Demand Breakdown

#### Normal Water Year

- **Firm Demand**
  - 2020: 18,758
  - 2025: 20,368
  - 2030: 20,882
  - 2035: 21,409

- **Recycled Demand, Direct**
  - 2020: 6,445
  - 2025: 6,500
  - 2030: 6,650
  - 2035: 7,150

- **Total Demand**
  - 2020: 25,203
  - 2025: 26,868
  - 2030: 27,532
  - 2035: 28,559

#### Single Dry Water Year

- **Firm Demand**
  - 2020: 18,758
  - 2025: 21,997
  - 2030: 23,122
  - 2035: 23,705

- **Recycled Demand, Direct**
  - 2020: 6,445
  - 2025: 6,500
  - 2030: 6,650
  - 2035: 7,150

- **Total Demand**
  - 2020: 25,203
  - 2025: 28,497
  - 2030: 30,272
  - 2035: 31,554

#### Multiple Dry Water Year - Year 3

- **Firm Demand**
  - 2020: 18,758
  - 2025: 21,793
  - 2030: 22,343
  - 2035: 22,908

- **Recycled Demand, Direct**
  - 2020: 6,445
  - 2025: 6,500
  - 2030: 6,650
  - 2035: 7,150

- **Total Demand**
  - 2020: 25,203
  - 2025: 28,993
  - 2030: 30,058
  - 2035: 31,229
USG Valley MWD

<table>
<thead>
<tr>
<th></th>
<th>Normal Water Year</th>
<th>Single Dry Water Year</th>
<th>Multiple Dry Water Year- Year 3</th>
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<td>903,000 935,000 966,000 996,000 1,025,000 1,025,000</td>
<td>903,000 935,000 966,000 996,000 1,025,000 1,025,000</td>
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<td><strong>Water Demands</strong></td>
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<td>157,101 162,739 146,118 148,495 150,747 150,747</td>
<td>157,101 162,739 146,118 148,495 150,747 150,747</td>
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<td>6,000 7,500 10,000 12,500 15,000 15,000</td>
<td>6,000 7,500 10,000 12,500 15,000 15,000</td>
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<td>163,101 195,239 177,118 179,995 188,747 188,747</td>
<td>163,101 195,239 177,118 179,995 188,747 188,747</td>
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<td>22,633 3,000 3,000 3,000 3,000 3,000</td>
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<td>Imported, MWD non-firm</td>
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<td>21,000 25,000 18,000 19,000 23,000 23,000</td>
<td>21,000 25,000 18,000 19,000 23,000 23,000</td>
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<tr>
<td><strong>Total Local</strong></td>
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<td>6,000 7,500 10,000 12,500 15,000 15,000</td>
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<td>38,000 38,500 55,000 55,000 56,000 56,000</td>
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<td>155.3 155.4 135.0 133.1 133.1 133.1</td>
<td>155.3 155.4 135.0 133.1 133.1 133.1</td>
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Potential Supplies
- Recycled for GW Replenishment | 5,000 5,000 10,000 10,000

Notes
- Plan goes through 2030 only; 2035 is assumed the same as 2030
- MWD Demand in red is firm demand only
- Plan show non-firm demands in dry and multiple dry years. These supplies are included as firm demands in this table.
## West Basin MWD

### Normal Water Year

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### Water Demands

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<td>Non-Firm, Replenishment</td>
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### Water Supply

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<th>2020</th>
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### Water Use GPCPD

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<td>186.2</td>
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### Notes

- Replenishment demands (IW and RW) are from Table 3-5, but not shown on tables 5-3 to 5-5
- Desalination includes brackish and ocean water
- Recycled does not include replenishment or deliveries to others
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<th>Western MWD</th>
<th>Normal Water Year</th>
<th>Single Dry Water Year</th>
<th>Multiple Dry Water Year</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
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<td>2015</td>
<td>102,362</td>
<td>122,157</td>
<td>141,804</td>
<td>160,675</td>
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<td>193,825</td>
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<td>2020</td>
<td>119,258</td>
<td>139,157</td>
<td>158,804</td>
<td>177,675</td>
<td>199,062</td>
<td>220,825</td>
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<tr>
<td>2025</td>
<td>136,154</td>
<td>155,157</td>
<td>174,804</td>
<td>193,675</td>
<td>215,062</td>
<td>236,825</td>
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<tr>
<td>2030</td>
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<td>171,157</td>
<td>190,804</td>
<td>209,675</td>
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<td>252,825</td>
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<td>2035</td>
<td>169,945</td>
<td>187,157</td>
<td>206,804</td>
<td>226,675</td>
<td>248,062</td>
<td>269,825</td>
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Population Projection

Total Demand in Service Area w/ cons

Water Demands

Firm Demand

Recycled Demand, Direct

Non-Firm, Replenishment

Total Demand

MWD Firm Demand

Water Supply

Imported, MWD firm

Imported, MWD non-firm

Imported, Other

Groundwater, Potable

Surface Supply/Storage

Recycled, Direct

Recycled, Indirect

Brackish Water

Seawater

Other

Conservation

Total Local

Total Water Supply

Conservation from UWMP

Per Capita Water Use GPCPD

Per Capita less Recycled/Non-Firm

Notes

Population is for retail area only. Per capita numbers cannot be calculated.

Supplies exceed demands in all cases.

Recycled water demand is 950 AFY, per Table 3-11.

Demand provided to MWD appears to exceed actual demands.

MWD Demand in 2010 from Delivery summary from MWD. Appears to be a conflict from Table ES-2.

Other includes purchases from Meeks, Daley and City of Riverside.

Existing and planned supplies are combined, as they appear certain.

Verify to see if above includes conservation.

2010 MWD Demand includes agriculture.

2010 Total Demand from Table 2-4.
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<td>52,080</td>
<td>63,980</td>
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<td>24,188</td>
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Southern California’s Local Water Supply Development Plans (2012 - 2035)

Up to 1.2 Million Acre-Feet
Does not include 650,000 AF of planned and state-mandated conservation.

Estimated On Line Date
- Green: 2012 - 2015
- Blue: 2016 - 2020
- Orange: 2021+
- Grey: Projects completed in two phases

County Boundaries
MWD Member Agency Boundaries

San Diego County Water Authority
sdcwa.org
4677 Overland Ave. • San Diego, California • 92123-1233
<table>
<thead>
<tr>
<th>County</th>
<th>Water Agency</th>
<th>Project</th>
<th>New Supply (AF)</th>
<th>On Line</th>
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January 16, 2013

Attention: Imported Water Committee

Bay-Delta Update. (Information)

Background
The Delta Stewardship Council has released a draft Delta Plan for public comment. The Bay-Delta Conservation Plan has been postponed, while the state and federal governments negotiate the conditions under which the federal government can issue Endangered Species Act permits for the Delta fix.

Discussion

Delta Stewardship Council
The Delta Stewardship Council adopted a final draft Delta Plan on September 13. Water Authority staff commented on the final draft Delta Plan on January 11, 2013. Previously, the Water Authority had commented on the third, fifth, and sixth staff drafts, as well as the draft Environmental Impact Report. Staff also participated in an ACWA Ag-Urban Coalition, which was successful in obtaining modifications of portions of the Delta Plan.

Bay-Delta Conservation Plan
The Bay-Delta Conservation Plan has slipped behind schedule. The state Natural Resources Agency and the state and federal water contractors are still negotiating with the federal fisheries agencies on a plan that could be permitted under the federal Endangered Species Act. As a result, the release of drafts the Conservation Plan and associated environment impact report/environmental impact statement (EIR/EIS) for public comment have been delayed from the fall of 2012 to some indefinite time in the spring of 2013.

Financing the BDCP
In 2012, the Natural Resources Agency commissioned a report by economist David Sunding to identify whether the benefits of the project to the SWP and CVP contractors exceed the costs of the project. Dr. Sunding has not completed his report, but he presented some tentative conclusions at a public meeting in Sacramento on June 20 and again on November 29. The report has not been completed because the Agency and the state and federal water contractors are still negotiating with the federal government over the concept of a “decision tree,” which will determine what will be the ultimate yield of the Delta fix project. Without knowing what the range of possible yields might be, it is impossible to compare the benefits of the project with the costs.

In his report, Dr. Sunding has tentatively concluded that the value of water supply reliability, especially in Southern California, will exceed the cost of the project. Another economist, Dr. Jeffrey Michaels of the University of the Pacific, also presented a study that showed the costs of the project far exceeding the benefits to the state as a whole. Dr. Michaels did not study the value
of water supply reliability as part of his report. He was hired by local Delta interests that are generally opposed to the BDCP.

In response to requests from various interests in the Delta region, the Natural Resources Agency has also commissioned a statewide cost-benefit study from Dr. Sunding. Dr. Sunding began work on the study on December 1, and will present preliminary concepts regarding the scope of the study to a Finance Working Group on January 23. The Water Authority is represented on the Working Group and will present a list of issues that should be addressed in the study.

**Next Steps for the BDCP**
The Natural Resources Agency has announced a revised schedule for the BDCP. The Agency intends to release an “administrative draft” of the conservation plan by the end of January. The schedule calls for the release of the public comment draft of the conservation plan at an indefinite time later in the spring of 2013, along with the environmental documents. When the public comment period has run and the Agency has responded to the comments, the BDCP may be ready for approval in the late fall of 2013.

Prepared by: Jeffrey Volberg, Government Relations Manager  
Reviewed by: Dennis Cushman, Assistant General Manager
January 16, 2013

Attention: Imported Water Committee

Portfolio Approach to Bay-Delta Conservation Plan. (Information)

Background
The Bay-Delta Conservation Plan is a process for obtaining permits under the state and federal Endangered Species Acts to allow the construction of a new conveyance system in the Sacramento/San Joaquin River Delta. In early 2012, the state Natural Resources Agency released an administrative draft of the Conservation Plan. The administrative draft proposed a twin-bore tunnel under the Delta with a capacity of 15,000 cubic feet per second, and with five 3,000-cfs intakes on the Sacramento River. The project was projected to cost $15 billion over 10 years and yield an average of 5.9 million acre-feet per year to the State Water Project and the Central Valley Project.

The federal fish and wildlife regulatory agencies responded to the administrative draft with a series of “red flag” memos that said the agencies could not issue permits based on the project proposed in the administrative draft. After a series of meetings in April through June, 2012, the state and federal agencies agreed on a revised project that would include a 9,000-cfs tunnel with three intakes, instead of five.

The ultimate yield of the completed project will not be determined until the project is completed, at which time the yield could be more or less than the yield of 4.9 million acre-feet under current restrictions. In other words, the state and federal water contractors may have invested $13 billion or more over 10 to 15 years only to find out they will receive less water, on average, than they did without the project.

Negotiations are continuing with the federal regulatory agencies to attempt to obtain some assurances as to a range of yields, as well as assurances that regulatory changes will not further reduce the expected yields. Without these assurances, many of the state and federal water contractors may choose to not continue with the conservation plan process. Because construction of the project is to be entirely financed by the contractors, the withdrawal of the contractors would doom the project.

In recent weeks, a new proposal has arisen that would adopt a “portfolio-based” approach to the BDCP. The proposal would call for a much smaller conveyance system in the Delta, along with increased investments in local and regional water supplies, increased water storage South of the Delta, improvements to Delta levees, and a smaller and more effective ecosystem restoration effort. Two coalitions, including a group of large urban water agencies (including the Water Authority, city of San Diego and Otay Water District), as well as a group of environmentalist organizations and other stakeholders, are calling for the state and federal governments to fully analyze this portfolio-based approach as an alternative within the BDCP and its associated environmental impact report and environmental impact statement. Letters from these two coalitions and the Portfolio-Based BDCP Alternative are attached.
Discussion

In 2012, the Water Authority adopted a set of policy principles concerning the Delta. The policy principles have been incorporated into the 2013 Legislative Policy Guidelines, which the Board adopted on November 29, 2012.

The policy principles affirm the Water Authority’s support for a Delta fix, but call for a cost-effective project that considers the actual demands for water exports. Water Authority staff have reviewed the portfolio approach that is being proposed and believe it should be fully evaluated as an alternative in the BDCP process.

The portfolio-based approach is not intended to be a final recommendation, but a platform for considering an alternative that is more cost-effective than the current proposed project, more acceptable to federal regulatory agencies, and more likely to provide benefits to a wider array of interests, including Bay-Delta interests and stakeholders.

The portfolio-based approach includes the following conceptual elements:

**A smaller conveyance system.** The portfolio suggests that the BDCP examine the use of a smaller 3,000-cfs tunnel system with one intake. If operations of the tunnel prove to be successful in meeting the goals of the BDCP, more capacity can be added at a later time as needed. The project would increase reliability of Delta water supplies, but would also be much less expensive and more cost-effective.

**Project Operations.** Project operations would be based on the best science available today. Operations would be scaled to protect and conserve a full range of fisheries resources, including upstream fisheries, while providing increased reliability of export water supplies. The project would operate on a “big gulp, little sip” principle that would allow for large amounts of exports in wet years with excess water in the river system and for much smaller exports in dry years when available water supplies are needed to protect fish and water quality. Additional storage below the Delta would allow water suppliers to draw upon stored supplies make up the difference in dry years. The anticipated range of yields under this approach would be 4.0 to 4.3 million acre feet per year on average, but would be more reliable.

**Reduced Reliance on the Delta through Investments in South of Delta Water Supplies.** Increased investments in local and regional water supplies South of the Delta would improve water supply reliability by allowing exporters to reduce their reliance on the Delta and rely upon local and regional supplies in dry years.

**Improved Water Agency Coordination.** Using the framework of Integrated Regional Water Management, local agencies could work together to improve regional water supply reliability. Connecting infrastructure among agencies and cooperating in management of water resources through conjunctive use agreements, storage agreements, water transfers and other management options could allow agencies the flexibility to manage shortages more effectively.

**New South of Delta Groundwater and Surface Water Storage.** By providing greater storage resources South of the Delta, the BDCP would be better able to employ the “big gulp, little sip”
method of operations. The amount of water that can be moved to exporters in extremely wet years is currently constrained by the lack of storage capacity in the system below the Delta pumps. In 2011, the export pumps were shut down for a couple of weeks in April due to lack of storage in the system, despite the availability of very large amounts of water in the Delta. The excess water went out to the Pacific Ocean. Increasing storage would allow more water to be moved into export areas in very wet years and stored for use in dry years.

**Levee Improvements.** The Delta water supply is protected and channeled by levees that were built over 100 years ago and sit on potentially unstable foundations. The BDCP so far has not addressed the need to re-engineer and rebuild strategic levees in the Delta. This conceptual element would call for improvement of the levees to increase protection for water supplies, as well as to improve habitats for fish and terrestrial species. The use of setback levees is very important for habitat restoration and could also contribute to the strength, safety, and reliability of the through-Delta conveyance system.

**Delta Floodplain and Tidal Marsh Habitat Restoration.** This conceptual alternative calls for the restoration of 40,000 acres of Delta floodplain and tidal marsh habitat. The current BDCP calls for the restoration of a greater acreage, but does not include the types of habitat that would be most effective in restoring species.

**Integrating Science into Delta Management.** The integration of scientific processes of review and adaptive management is essential to ensure the achievement of the co-equal goals of water supply reliability and ecosystem restoration. The portfolio approach calls for independent review of science, quantified performance objectives, governance and adaptive management processes based on the best available objective science, and carefully designed roles for the various interests in the Delta, in order to ensure the best use of objective science.

**Affording and Paying for the Portfolio Alternative.** The construction of a smaller conveyance facility would free up billions of dollars that could then be used to pay for the other elements of the conceptual alternative. Although the portfolio approach may result in a smaller average yield of water from the State Water Project and Central Valley Project, other non-conveyance elements such as the investment in local and regional supply and South of Delta storage could lead to an overall increase of approximately 1 million acre feet per year in water supply and water supply reliability over the supply that has been available through the two existing projects.

The portfolio approach is only the conceptual framework for an alternative to the current proposed project in the BDCP. Because the current proposed project may prove to be infeasible due to the uncertainty about the ultimate yield of the project and cost, this alternative presents an opportunity to continue toward a cost-effective, right-sized Delta fix.

Prepared by: Jeffrey Volberg, Government Relations Manager
Reviewed by: Dennis Cushman, Assistant General Manager

Attachments: Urban water agency and stakeholder letters and Portfolio-Based BDCP Conceptual Alternative
January 16, 2013

The Honorable Ken Salazar  
Secretary  
U. S. Department of the Interior  
1849 C Street, N. W.  
Washington, DC  20240

Dr. Jerry Meral  
Deputy Secretary  
California Natural Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento, CA  95814

The Honorable John Laird  
Secretary  
California Natural Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento, CA  95814

The Honorable Michael L. Connor  
Commissioner  
U. S. Department of the Interior  
1849 C Street, N. W.  
Washington, DC  20240

Dear Secretary Salazar, Secretary Laird, Deputy Secretary Meral, and Commissioner Connor:

We are writing to you in advance of the planned release of the public review draft of the Bay Delta Conservation Plan (BDCP), out of a deep concern over the status of this effort. We are united in a desire for a successful project that can be supported by project proponents, Delta stakeholders, and the public. That chance for success is substantially diminished as a result of the alternatives analysis that we have seen thus far. Up to now, the BDCP process has been strongly focused on advancing a large capacity conveyance which, along with the suite of associated conservation measures, will be burdened with large uncertainties and for which a solid business case has not yet been made. These unquantified risks include impacts on listed species, impacts on the Delta landform, hydrology and water quality, open-ended costs to direct water users and to the public, political controversy, and potentially lengthy litigation.
Absent so far has been a portfolio-based alternative that features a smaller conveyance facility with additional, complementary investments in local water supply sources, regional coordination, south of Delta storage, levee improvements, and habitat restoration (see attachment) as advanced in the coalition letter sent by other organizations today. We believe that it is critical to evaluate in detail a conveyance as small as 3,000 cfs, as it would provide considerable water supply benefits to the export community while better protecting broader interests in the Delta. Such a facility would also realize significant financial savings in comparison with a larger conveyance facility, face fewer legal and political challenges, and potentially be completed sooner. With accompanying investments in proven, cost-effective regional water strategies, this approach could increase export area water supplies and reduce the vulnerability of water supplies and Delta infrastructure to disruption from earthquakes and other disasters. We urge that this conceptual alternative be seriously considered in the BDCP process, including the required CEQA/NEPA analyses and the Clean Water Act Section 404 alternatives analysis.

A portfolio approach could produce superior benefits at a similar or lower cost to water users and the public, and at reduced levels of environmental impacts. It has the potential to be consistent with the best available science and, as a result, may be more readily permittable and capable of delivering benefits more rapidly. It would appear that a solid business case can be made for such an alternative; in any event, the business case must be made before any project proceeds.

We fully appreciate the magnitude of the challenges facing the Delta, and urge a comprehensive solution that is both affordable and science-based. We recognize the enormous effort you have undertaken toward this end, and hope that this conceptual alternative will continue to advance the discussion.

Sincerely,

Jerry Brown
General Manager
Contra Costa Water District

Maureen A. Stapleton
General Manager
San Diego County Water Authority
Secretary Salazar, Secretary Laird, Deputy Secretary Meral, and Commissioner Connor
January 16, 2013
Page 3

Michael P. Carlin
Deputy General Manager
San Francisco Public Utilities Commission

Alexander R. Coate
General Manager
East Bay Municipal Utility District

Bob Filner
Mayor
City of San Diego

Walter L. Wadlow
General Manager
Alameda County Water District

Mark Watton
General Manager
Otay Water District

Attachment
January 16, 2013

Re: A Portfolio-Based Conceptual Alternative for BDCP

Dear Secretary Salazar, Secretary Laird, Deputy Secretary Meral and Commissioner Connor,

We represent a coalition of business and environmental organizations. We are writing to request that the attached conceptual alternative be considered in the BDCP process, including as a stand-alone alternative in the required CEQA/NEPA analyses and Clean Water Act Section 404 alternatives analysis. Our constituents believe strongly in the need for a science-based, cost-effective BDCP plan to help achieve the co-equal goals of restoring the Bay-Delta ecosystem and salmon fishery, and improving water supply reliability for California. None of us believes that the status quo in the Delta is acceptable.

Although many stakeholders have recommended that BDCP consider certain elements that are included in the attached document, we thought it would be most helpful at this point in the BDCP process to offer a package of actions and investments that, taken together, represent an alternative that could attract support from a diverse coalition of interests. This is a conceptual alternative, not a proposed BDCP preferred project. We believe that analysis of this alternative will assist BDCP in developing the most cost-effective, environmentally beneficial final BDCP project with the best chance of implementation.
At the heart of the conceptual alternative are two simple principles. First, BDCP must be grounded in the best available science regarding ecosystem management. This approach is essential to designing a successful, long-term plan for a water supply system and ecosystem as complex and dynamic as the Bay-Delta. This approach is also essential to ensure that the BDCP plan can meet legal requirements and receive permits. We applaud Governor Brown and Secretary Salazar for emphasizing their commitment to a science-based approach to BDCP in their July 25, 2012 announcement.

The second core principle is that the BDCP make fiscal sense. The final BDCP plan must be both affordable and financeable or it will ultimately fail. We believe it is imperative at this point in the BDCP process to avoid the economics and financing issues that plagued CALFED and contributed to its eventual failure.

This conceptual alternative was also developed with two practical realities in mind. First, the conceptual alternative has been developed based on the reality that many California water suppliers are looking closer to home to meet their long-term water supply needs and are planning to reduce their demand for water imported from the Bay-Delta. The second reality is that cities and water agencies, as well as federal, state and local budgets are facing significant financial constraints. We believe that it is critically important to balance the timing and need for investments in the Delta with a strategy that also advances continued water agency investments in local water supply development.

This “portfolio-based” approach reflects the real world desire of water suppliers and the public to evaluate the relative benefits of investments both within and outside of the Delta, and is consistent with the increased discussion in BDCP, over the past six months, of South of Delta water supply alternatives.

One of the cornerstones of the conceptual alternative is a proposal to evaluate a 3,000 cfs, single-bore North Delta diversion facility. This facility would produce significant financial savings, in comparison with a larger conveyance facility, while still providing water reliability benefits. In fact, we believe it could produce greater overall benefits at a lower cost, with some of the savings invested in local water supply sources, new South of Delta storage, levee improvements and habitat restoration. For example, investments in proven, cost-effective local water supply strategies can both increase export area water supplies and reduce the risk of disruption from earthquakes and other disasters. Southern California 2010 Urban Water Management Plans have already identified 1.2 MAF of potential additional local supply projects, only a small fraction of which have been factored into Delta planning.

Many of these local investments could provide significant, broad and long-term benefits. For example, a relatively small investment (in comparison with the cost of a new Delta facility) in Delta levees would provide significant water supply benefits beyond those achievable by the BDCP as currently conceived. The BDCP currently anticipates that, even with a large facility, on average, approximately half of the water exported from the Delta would still be pumped by the South Delta facilities (with more than three quarters of exported water pumped from the
South Delta in critically dry years). Therefore, reducing the vulnerability of Delta levees would provide significant water supply reliability benefits for South of Delta water users, particularly in dry years. Such an investment, in combination with local and public funds, would provide additional local benefits in the Delta. We believe that BDCP should include such “win-win” opportunities to collaborate with in-Delta interests.

It is essential not to delay an evaluation of the likely yield of a new Delta facility. The conceptual alternative also calls for the careful analysis of the best science available today regarding water project operations with a new facility. In particular, this approach calls for the analysis of an operations proposal developed by state and federal biologists to conserve and manage a full range of covered Delta fish species, including consideration of the need to protect upstream fisheries resources. We understand that state and federal biologists have undertaken an extensive effort to prepare such an operational scenario. The signatories to this letter have not endorsed these proposed operations. Rather, given that this operational scenario represents an important effort by state and federal biologists, it should be analyzed in the BDCP EIR/EIS, the Effects Analysis and the 404 analysis.

This conceptual alternative includes initial cost estimates that suggest that this approach could provide superior environmental results, increased water supply and greater reliability at a reduced cost. By expanding benefits and lowering costs, this portfolio approach could assist with project financing. We encourage BDCP to include this approach in its analysis of economics and financing issues, and to refine the cost estimates included in this conceptual alternative.

We sincerely believe that this conceptual alternative has the potential to produce superior benefits at a similar or lower cost to water users and the public. Because it is based on the best available science, we believe it would be more readily permissible. It also promises to deliver benefits more rapidly. And, finally, we believe that this approach will be helpful in attracting broader support for BDCP, both within and outside of the Delta.

We request that this conceptual alternative be analyzed as a stand-alone alternative in BDCP’s environmental documents. In addition, we recommend that BDCP use this portfolio approach to compare the potential benefits and impacts of multiple alternatives, including a full range of different conveyance facility capacities. Such comparisons are needed so decision-makers can fully understand the choices they face and can select the optimum portfolio of actions that will best serve the state.
Thank you for your hard work to design an effective plan to meet the challenges we face in the Delta. We hope that this conceptual alternative will continue to advance the discussion. We look forward to an opportunity to discuss the conceptual alternative with you, including how it may best be incorporated into BDCP’s analysis.

Sincerely,

Barry Nelson, Senior Policy Analyst
Natural Resources Defense Council

Tony Bernhardt
Environmental Entrepreneurs

Linda Best, President and CEO
Contra Costa Council

Gary Bobker, Program Director
The Bay Institute

Kim Delfino, California Program Director
Defenders of Wildlife

Jonas Minton, Water Policy Advisor
Planning and Conservation League
A Portfolio-Based BDCP Conceptual Alternative

The eight components described below represent a conceptual alternative, not a proposed BDCP project. The analysis of this alternative is intended to assist BDCP in developing the most cost-effective and environmentally beneficial final BDCP project that can be implemented and produce benefits rapidly. Variations on the approaches below should be analyzed as well, including a full range of conveyance capacities.

Guiding Principles

Science-Based Ecosystem Management: Credible, proven science will determine ecosystem improvements and water management, using on-the-ground results as the central driver of decision-making.

Water Supply Reliability: The BDCP can contribute to improved water supply reliability by reducing the physical vulnerability of Delta water supplies and embracing a portfolio approach that recognizes that water suppliers and the public have a broad range of options both in and outside of the Delta to meet their water needs and improve reliability.

A Strong Business Case: A strong business case is central to the success and financial viability of the BDCP. Sound economic principles and cost-benefit analysis must inform water supply improvements so that water ratepayers understand that the benefits they will receive from the project are reasonably proportional to what they are being asked to pay.

Water Quality: Delta water quality will be strongly influenced by the final BDCP plan, with potential impacts and benefits to export water users, local municipalities, Delta residents, Delta farmers and the ecosystem.

Conceptual Elements of a Diversified Portfolio Approach

New Conveyance Facility: Focus BDCP analysis on one 3,000 cfs North Delta intake facility and a single tunnel sized for 3,000 cfs gravity flow. This smaller facility would lower BDCP costs, improve reliability and reduce opposition. If implementation proves successful in meeting biological goals and objectives, a second phase could be constructed subsequently, but would not be permitted at this time.

Project Operations: Analyze, as a starting point for analysis of future SWP and CVP operations, the best science available today. In particular, analyze the operations proposal developed by state and federal biologists to conserve and manage a full range of covered Delta fish species, including consideration of the need to protect upstream fisheries resources. Project operations should utilize a “big gulp, little sip” approach that increases exports in wet years — when water is available in excess of environmental needs.

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1 The work of state and federal agency biologists to produce a science-based operational scenario is summarized on pages 1-16 of this BDCP presentation - http://www.essexpartnership.com/wp-content/uploads/2012/11/BDCP_CS5_Update_NGO-Meeting_11_14_12v3.pdf
PORTFOLIO-BASED BDCP CONCEPTUAL ALTERNATIVE
January 16, 2013
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and reduces diversions in average and drier years, particularly during key periods such as the spring and fall. Such an operations proposal has been developed over the past year by state and federal fish agency biologists. This is an important agency analysis that should be subjected to additional refinement in an open, transparent process, utilizing independent external peer reviewers. It is essential not to delay a detailed analysis of the likely yield of a new facility based on the best available science.

Estimated Water Exports: ~4 - 4.3 MAF/year (2025). This is an initial estimate of average exports. BDCP has not yet modeled a 3,000 cfs facility with additional South of Delta storage and the agency-developed operational scenario included in this proposal.

Reduced Reliance on the Delta through Investments in South of Delta Water Supplies: DWR, many Urban Water Management Plans and other analyses have concluded that local water supply tools including conservation, water recycling, and other approaches, can provide reliable, sustainable and plentiful new sources of supply that will also be cost-effective over the long run. These sources can also be provided rapidly through additional investments. There is approximately as much new water available from these new water supply sources as is currently exported from the Delta.

This conceptual alternative proposes a smaller capital investment in a Delta facility, in comparison with the current BDCP preliminary project, and investment of savings in local water supply projects. For analytical purposes, this alternative includes a $2 billion investment in water recycling (at a capital cost of approximately $6,430 -6,470 per AF of permanent water recycling capacity) and a $3 billion investment in urban conservation (at an initial/capital cost of $3,230 -4,860 per AF). Urban stormwater capture, groundwater cleanup, and conjunctive use should be included as cost-effective methods for generating future new sources of water, and would also be important elements of a large-scale effort to invest in new local water sources. Additional cost-effective savings can also be obtained from investments in agricultural conservation.

Estimated Yield: 926,000 - 1,245,000 acre-feet of permanent water supply. (309,000 - 311,000 acre-feet from water recycling and 617,000 - 934,000 acre-feet from urban efficiency.)

Improved Water Agency Integration: The principles of integrated regional water management planning should form the foundation for improving cooperation and integration among Bay Area, Central Valley, and Southern California water agencies to

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2 See attachment for additional detail regarding cost and yield estimates. Note that these are initial/capital costs, not annual per-acre-foot unit costs. A comprehensive BDCP analysis should also address operations and maintenance costs of a full range of alternative investments.

3 The Department of Water Resources Draft Bulletin 160-2009 http://www.waterplan.water.ca.gov/cwpu2009/index.cfm (Volume 2, Chapter 2, page 2-13) states that agricultural water conservation costs range from $35-$900 per AF. Because of the width of this cost range, agricultural conservation is not included in the conceptual cost and yield numbers above. A final BDCP portfolio proposal should, however, include agricultural water use efficiency investments.
provide improved water supply reliability and quality benefits. Increasing integration and cooperation among these agencies could produce substantial potential benefits and cost-savings. For example, more than a dozen significant water agencies serve the Bay Area. Improved physical connections and increased cooperation among these agencies could reduce risks related to earthquakes and localized drought conditions, facilitate wastewater recycling, and utilize existing infrastructure more efficiently.

In Southern California, additional benefits could be obtained, for example, by facilitating water management agreements and programs among agencies with the potential to construct water recycling facilities and agencies that have groundwater storage resources. The Metropolitan Water District could operate its system to facilitate innovative and cost-effective water management programs between agencies in Southern California and elsewhere in the state. Southern California groundwater agencies could allow water from Southern California surface storage facilities to be managed conjunctively with regional groundwater storage facilities. This could, in essence, create new surface storage capacity at the far lower cost associated with groundwater storage. This approach could help take advantage of the supplies available during “big gulp” opportunities in the Delta. Similar potential benefits may exist through increased integration and cooperation in the agricultural sector.

In all of these opportunities it is imperative that program costs be clearly identified and allocated to the water suppliers that benefit. In this way, each public water supplier is able to account to the public it serves that their water ratepayer dollars are being spent wisely, according to law and in a manner that provides clear benefits.

**New South of Delta Surface and/or Groundwater Storage:** Include up to 1 MAF\(^4\) of new South of Delta storage, with funding allocated through competitive bidding to evaluate proposed surface, groundwater and conjunctive use projects. Investments should be focused on projects that can be completed quickly and that are most cost-effective. Additional South of Delta storage\(^5\) can allow for greater water exports in wetter years. As discussed above, surface storage south of the Delta could be used conjunctively with groundwater facilities to store wet-year exports for future dry years. This increase in storage capacity must be accompanied by new Delta operations that ensure that the new storage will be operated to implement “big gulp, little sip” operations.

**Levee Improvements:** Improve existing levees and build setback levees as part of habitat restoration. A $1 billion additional investment could improve Delta levees to protect life, property, and important infrastructure, and also upgrade key levees including the eight western Delta islands to a higher standard with improved stability and resilience.

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\(^4\) This 1 MAF storage target is based on limited BDCP modeling and may be revised based on further analysis.

\(^5\) As used in this proposal, South of Delta storage is defined as storage integrated into the existing SWP and CVP Delta export system, including surface and groundwater storage in the Bay Area, the west side of the San Joaquin Valley, Kern County and Southern California. It includes storage controlled by the CVP, the SWP, MWD, Kern County Water Agency and other regional and local agencies.
in the face of seismic risk. Upgrading these key levees would provide significant water reliability benefits and would be an appropriate use of exporter funds.

Regardless of the size of a Delta facility, maintaining and improving Delta levees is critical to ensuring the physical reliability of Delta exports. Even with new conveyance, the CVP and SWP will continue to rely on water exports from the South Delta, particularly in drier years. With a 9,000 cfs facility, exports from the South Delta would constitute approximately 50 percent of total exports. In critically dry years, BDCP currently anticipates that 75 percent of total exports would be diverted from the South Delta. Therefore, the benefits of this proposed investment in levee improvements would be particularly significant in dry years. BDCP does not currently include a strategy to reduce the physical vulnerability of the portion of Delta exports that would continue to rely on the Delta levee system.

East Bay Municipal Utility District, Contra Costa Water District and Delta landowners currently contribute to the maintenance of the levees upon which they rely. An analogous investment by export agencies would produce significant reliability benefits. For example, with average exports of 4 MAF/y, a contribution of $8/AF would produce $480 million to help improve Delta levees over the coming 15 years. Public funds for levee improvements are appropriate to protect Delta residents and infrastructure of regional and state importance (e.g. highways). Additional local contributions may be required.

**Delta Floodplain and Tidal Marsh Habitat Restoration:** Implement a large scale, approximately 40,000 acre habitat restoration program to benefit Delta fish and wildlife species, to provide a broad range of ecosystem functions and to be integrated with Delta flood management improvements. There is strong scientific evidence that floodplain habitat restoration, combined with adequate flows, can benefit salmon and other species. However, agency “red flag” memos and the National Research Council review of the existing biological opinions concluded that floodplain restoration cannot substitute for required ecosystem flows. Restoration of tidal marsh habitat, also a desirable activity, nonetheless, has far greater uncertainty associated with it, regarding benefits for many covered species, in comparison with the likely benefits of floodplain restoration. Tidal marsh restoration should be included in the BDCP plan as a complement to flow augmentation and floodplain restoration, as it is more likely to benefit some covered fish species in combination with these elements. Habitat restoration, particularly tidal marsh restoration, should in any case be implemented within an adaptive management framework. Existing CVP and SWP mitigation responsibilities, as well as new mitigation responsibilities associated with a new Delta facility, will be paid for by water exporters, while public funding should be focused on conservation benefits that go beyond

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mitigation. This proposal is focused on the coming 15-20 years. Long-term restoration efforts are likely to require additional funding.

**Integrating Science into Delta Management:** Increase the integration of the best available science into all aspects of Delta and related resource management. The Delta is a complex and highly dynamic system. During the past decade, an expanded investment in science has improved our understanding of this ecosystem. With ongoing investments, that understanding will continue to improve. A long-term investment in science and a program to integrate new scientific results into ongoing management are essential to long-term success. Therefore, BDCP should include the following:

- External independent scientific review at critical points, with clear mechanisms to incorporate peer review results.
- Quantified performance objectives, such as SMART\(^7\) biological objectives and criteria for ecosystem restoration and water operations.
- Governance and adaptive management processes designed to ensure that goals and objectives are achieved, to obtain the best available science over time, and to ensure that scientific results are fully integrated into on-the-ground management.
- Carefully designed roles for the state and federal projects, as well as other stakeholders, to ensure a reliance on objective science.

This science-based approach is not anticipated to result in large increases in project costs. In fact, this approach would increase the cost-effectiveness of BDCP efforts, and should result in savings.

**Affording, and Paying for the Portfolio-Based Conceptual Alternative**

Our organizations strongly support an analytically-based beneficiary pays approach to BDCP financing. We believe that the analysis of this portfolio approach will assist BDCP in developing detailed cost allocations and in attracting additional funding partners. It will also help reduce pressure for public funds and ensure that such funds are spent effectively and appropriately.

Preliminary cost estimates indicate that this conceptual alternative is less expensive than the current preliminary preferred BDCP project. In addition, some of the investments in this portfolio alternative, such as levee and local water supply investments, are likely to be necessary even with a large Delta facility. Therefore, the actual cost difference between these two different approaches may be larger than indicated here.

This conceptual alternative is more financially viable than the preliminary preferred 9,000 cfs Delta facility project. That project, pegged at $14 billion or more, is proposed to be paid for by water exporters. Proposed habitat restoration could cost up to an

\(^7\)SMART objectives are those that are specific, measurable, achievable, relevant to the goal and timebound.
additional $4 billion, raising the total capital cost of the current approach to approximately $18 billion. By reducing the size of the project to a 3,000 cfs, single-bore facility, many billions of dollars can be freed up to invest in more local supply development and the water exporter shares of the other conceptual alternative components.

The water code requires water users to pay for a new Delta facility. The public share of this conceptual alternative could be funded in part by a reduced water bond. The increased benefits and reduced cost of this approach can assist BDCP in attracting increased funding from beneficiaries, reducing the pressure on the water bond. We believe that the diversified portfolio approach in this conceptual alternative could assist in the effort to develop a broadly supported and effective new water bond.

**Estimated Cost Summary**

<table>
<thead>
<tr>
<th>Conceptual Portfolio Component</th>
<th>Estimated Cost</th>
<th>Source of Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>New 3,000 cfs North Delta Facility</td>
<td>~$5-$7 billion$^9$</td>
<td>Export water agencies</td>
</tr>
<tr>
<td>Local Supply Development</td>
<td>$5 billion</td>
<td>Local water agencies and cost share per state IRWMP</td>
</tr>
<tr>
<td>Improved Water Agency Integration</td>
<td>TBD (may be funded through local supply funds described above)</td>
<td>Water agencies and cost share per state IRWMP</td>
</tr>
<tr>
<td>New South of Delta Surface and/or Groundwater Storage</td>
<td>~$1.2 billion$^{10}$</td>
<td>Exporters or local water agencies, and public cost share per IRWMP</td>
</tr>
<tr>
<td>Levee Improvements</td>
<td>$1 billion</td>
<td>Public, water exporters and other beneficiaries and Delta community</td>
</tr>
<tr>
<td>Delta Floodplain and Tidal Marsh Habitat Restoration</td>
<td>$1.7 billion</td>
<td>Export agencies and public</td>
</tr>
<tr>
<td>Integrating Science into Delta Management</td>
<td>TBD</td>
<td>Public and water agencies</td>
</tr>
<tr>
<td><strong>Total Conceptual Alternative Cost</strong></td>
<td>~$14 to $16 billion</td>
<td></td>
</tr>
</tbody>
</table>

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$^8$ California Water Code Section 85089
$^9$ A BDCP July 1, 2010 presentation estimated the capital cost of a 3,000 cfs facility with 2 18-foot diameter tunnels at $7.2 billion. Using a single tunnel would reduce costs significantly.
$^{10}$ See attachment for details regarding cost estimates.
Total Conceptual Alternative Water Supply Benefits

~ 4.9-5.5 MAF/YR.
  Delta exports: ~ 4-4.3 MAF/Y.
  New South of Delta sources: ~ .93-1.2 MAF/Y
January 16, 2013

Attention: Imported Water Committee

Colorado River Basin Water Supply and Demand Study (Information)

Purpose
This report describes the Colorado River Basin Water Supply and Demand Study completed December 2012.

Discussion
In 2010, the Bureau of Reclamation and the seven Colorado River Basin states began a study of the basin’s projected water demands and supplies. The Colorado River Basin Water Supply and Demand Study is part of the Department of Interior’s WaterSMART program, which includes studies of other major river basins throughout the West. In addition to the Bureau of Reclamation and the seven Colorado River Basin states, a large group of stakeholders was involved in developing and reviewing the work, including Native American tribes, conservation groups, and organizations representing recreation and hydroelectric power interests. In October 2012 the study was awarded Interior’s “Partners in Conservation” award, which recognizes collaborative efforts to conserve and restore natural resources.

Current Colorado River demands and supplies
The Colorado River is considered to be over-allocated, with existing average demand for water greater than the long-term average of river supply. The chart from the study below shows how diversions from the Colorado River have increased over time to exceed the average historical supply. Climate change is expected to both increase drought and demand for river water and decrease its availability.
To date, water demands for agricultural and urban uses have been met without declared shortages through the use of a relatively large volume of reservoir storage capacity, unused Upper Basin state apportionments, and conservation programs implemented in the Lower Basin states. This will become increasingly difficult without additional management efforts, as demands increase and supplies remain the same, at best. Additional water demands also exist for “non-consumptive” water use, including water for fish and wildlife, recreation, water quality, and hydropower generation. These demands affect the amounts and timing of water that can be diverted for consumptive use purposes.

Colorado River Basin Study overview

The Colorado River Basin Study was begun in January 2010 as a collaborative effort between Reclamation and the basin states, and included an extensive outreach effort and the participation of major river stakeholders. The objective of the study was to review basin water demands and supplies projected through 2060, and offer strategies and options for addressing any imbalances between demand and supply. The study was organized into four phases:

1. An assessment of future water supply;
2. An assessment of future water demand;
3. A system reliability analysis; and
4. The development and evaluation of strategies for balancing supply and demand.

The Study projects Colorado River Basin conditions under a variety of planning scenarios, including the potential effects of climate change, and includes options for addressing supply/demand imbalances. The study does not recommend any specific option or strategy to pursue, but evaluates types of actions that would likely be feasible for implementation.

Water Supply Assessment: The water supply assessment determined the probable natural inflows to the river system, using planning scenarios that account for potential changes in climate and streamflow variability. Four potential water supply scenarios were modeled, using:

1. Observed streamflow trends and variability, in which future hydrologic trends and variability are projected to be similar to the past 100 years;
2. “Paleo” trends and variability, which uses reconstructions of streamflow over a much longer period (nearly 1,250 years);
3. Observed trends but with increased variability of flow, which used the longer paleo period (nearly 1,250 years) to model variability, but with magnitudes of flow that are more similar to the observed period (about 100 years); and
4. Climate change trends, in which the future climate will continue to warm, affecting regional precipitation and hydrology.

The chart below, taken from the Study, shows the annual flows on the Colorado River expected from the four planning scenarios. Each of them shows less average flow than the 16.5 maf/yr combined total existing apportionment, including 15 maf for U.S. use and 1.5 maf for Mexico.

<table>
<thead>
<tr>
<th>Annual Flow (maf)</th>
<th>Observed</th>
<th>Paleo</th>
<th>Observed / With Increased Variability</th>
<th>Climate Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>15.0</td>
<td>14.7</td>
<td>14.9</td>
<td>13.7</td>
</tr>
<tr>
<td>Minimum</td>
<td>5.6</td>
<td>2.3</td>
<td>5.6</td>
<td>4.2</td>
</tr>
<tr>
<td>Maximum</td>
<td>25.2</td>
<td>24.3</td>
<td>25.2</td>
<td>44.3</td>
</tr>
</tbody>
</table>
*Water Demand Assessment:* This phase of the study evaluated a range of assumed scenarios to determine potential future water demand. These assumptions used in the scenarios related to changes in future population and demographics, land use, technology, economic conditions, and social and governance structures. The scenarios included assumptions for both rapid and slow population and economic growth, and for an enhanced basin environment.

Figure C-5 below, excerpted from one of the study’s technical memoranda (*Technical Memorandum C – Quantification of Water Demand Scenarios*) shows historical and projected Colorado River water demand under the defined scenarios. The current annual demand of about 15 maf increases to a range of 18.1 to 20.4 maf by 2060. There is a 2.3-maf spread between the 2060 high and low demand estimates, with the highest projection coming from rapid growth assumptions, and the lowest estimated from slow growth assumptions. Most of the growth in demand (up to 74 percent of the total) is for M&I use. Most of the remaining growth is from demand for energy production and tribal use.

*Figure C5*

Colorado River Basin Historical Use1 and Future Projected Demand1, Delivery to Mexico2, Reservoir Evaporation3, and Other Losses4

*Quantified demand scenarios have been adjusted to include Mexico’s allotment and estimates for future reservoir evaporation and other losses.*
System reliability measurement
The study evaluated the ability of the river to meet the needs of six defined resources under a variety of conditions, and described the potential impacts to the resources from imbalances between supply and demand. The resources that were evaluated are:

1. Water deliveries (for consumptive use)
2. Electric power generation
3. Water quality
4. Flood control
5. Recreation
6. Wildlife and habitat

Metrics were defined for each of the resource categories. Metrics for water deliveries include consumptive use, shortages, and the socioeconomic impacts associated with shortages. Reclamation’s computer model, Colorado River Simulation System (CRSS), was the primary metrics tool and was used to simulate the operations of reservoirs. The model generates information on projected water storage in reservoirs, reservoir elevations, water releases from dams, amounts of water flowing at various points in the system, total dissolved solids content, and diversions to and return flows from water users. Some metrics are taken directly from CRSS output, such as water diversions and flows. Other metrics use indirect measurements, based on projected flows, to estimate impact to the resource, such as flows to aquatic and riparian habitats. Socioeconomic impacts were measured qualitatively.

Conclusions: system reliability and options for balancing supply and demand
The study was intended to answer two questions:
1. What is the future reliability of the Colorado River system to meet the needs of Basin resources through 2060; and
2. What are the options and strategies to mitigate future risks to these resources?

The first question was answered by reviewing the reliability of the system under baseline conditions – without implementing any new options or strategies to offset imbalances between supply and demand – and identifying vulnerabilities to system resources. The study found that growing imbalances between demand and supply would continue regardless of assumptions made in scenarios regarding future water use and hydrology. This would cause elevations at Lake Mead and Lake Powell to decline over time and increase the likelihood of water shortages, reductions in hydroelectric power production, harm to wildlife habitat and recreational uses.

The second question was answered by identifying and testing a number of alternative water management responses to the imbalances. Options and strategies to address imbalances were identified, and then bundled into four portfolios for analysis. The named portfolios were created to represent alternate strategies that could be used:

- **Long-Term Reliability**: Includes options that have high technical feasibility and omits options that have relatively high risk of implementation associated with permitting, legal, or policy issues.
- **Low Impact**: Includes options with relatively low energy intensity, such as water banking, and excludes options that have low feasibility or high permitting risk.
- **Highly Inclusive**: Includes all the options selected under Long-Term Reliability and Low Impact portfolios, and prioritizes development based on cost.
- **Highly Selective**: Includes options that are common to both the Long-Term Reliability and Low-Impact portfolios.
The table below shows the potential major resource options that were developed for the Low Impact and Long-Term Reliability Portfolios. These supplies and demand management projects would be implemented during the 2015-2060 time period.

<table>
<thead>
<tr>
<th>Option Type</th>
<th>Low Impact (kaf/yr)</th>
<th>Long-Term Reliability (kaf/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desalination</td>
<td>620</td>
<td>1,476</td>
</tr>
<tr>
<td>Imported Water</td>
<td>0</td>
<td>600</td>
</tr>
<tr>
<td>Local Supply</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>Water Reuse</td>
<td>1,150</td>
<td>972</td>
</tr>
<tr>
<td>Watershed Mgt</td>
<td>730</td>
<td>300</td>
</tr>
<tr>
<td>Ag Conservation</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Water Use Efficiency</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>M&amp;I Conservation</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,735</strong></td>
<td><strong>5,608</strong></td>
</tr>
</tbody>
</table>

Desalination options from these portfolios range from projects on the Pacific Ocean, including the proposed Carlsbad plant and a project being studied in Baja California, Mexico; projects at the Salton Sea; the Colorado River at Yuma; and at various groundwater basins. Imported water supplies would be obtained by conveying water from other river systems, including the Missouri and Green rivers. Watershed management projects include weather modification and vegetation control, such as the removal of invasive species like tamarisk (salt cedar). All of the portfolios reviewed featured the relatively early development of M&I and agricultural water conservation, because these options are available early and effectively address imbalances. Major differences in the portfolios include cost, environmental impacts, and long-term reliability. By 2060, the average annual portfolio cost ranged from $3.5 to $4.5 billion, with a tradeoff between longer term reliability and higher cost. Tradeoffs also exist between the certainty of water yield from management options and environmental impacts.

System vulnerabilities were found to be relatively small from 2012 through 2026, even under baseline conditions. River hydrology is the greatest driver of vulnerability for this time period, with the greatest vulnerabilities occurring under assumed climate change scenarios. From 2026 through the end of the study period, baseline vulnerabilities increased significantly, but management actions in all four portfolios were shown to have the capacity to reduce the vulnerabilities by 50 percent or more. None of the portfolios entirely eliminated system vulnerability throughout the study period.

The study confirmed that the vulnerability of system resources will increase without management actions, and that options are available to mitigate this risks. The study was not intended to result in the selection or funding of any “best” portfolio for development, but to show how a wide range of options could be considered to meet resources needs. Left for future discussions are issues related to the tradeoffs between acceptable levels of risk to resources and the costs and benefits of various management options.

Prepared by: Dave Fogerson, Senior Engineer
Reviewed by: Halla Razak, Colorado River Program Director
January 16, 2013

Attention: Imported Water Committee

Metropolitan Water District Program Report (Information)

Purpose
This report summarizes activities associated with the Metropolitan Water District of Southern California and other imported water agencies and organizations.

Discussion
Metropolitan Water District (MWD). This report provides a summary of key actions at the January 7 and 8 meetings of the MWD Board of Directors. The next committee and board meetings will take place February 11 and 12, 2013.

Quantification Settlement Agreement (QSA).
Part 2 of a two-part oral report on QSA issues was presented in the Water Planning and Stewardship Committee. The QSA provides the means to implement water transfers and supply programs that allow California to live within the State's 4.4 million acre-feet (AF) basic annual apportionment of Colorado River water. Staff discussed four issues it identified: 1) uncertainty surrounding the Salton Sea mitigation; 2) shortfall of conserved water to implement to water transfer between the Imperial Irrigation District (IID) and the Water Authority; 3) challenges of meeting the QSA benchmarks; and 4) an independent report IID board commissioned regarding the QSA. Acknowledging potential legal uncertainties, nonetheless, staff reported on the various Colorado River water supply options MWD can potentially harness if the QSA fails. Additionally, staff stated that further supplies could be developed through water efficiency measures and local projects, as well as storage and transfer programs on the State Water Project. If the IID/Water Authority transfer were to terminate, MWD suggested that the Water Authority would probably purchase more water from MWD.

Foundational Actions Progress and Proposed Funding Program.
The Water Planning and Stewardship Committee heard a report on the progress of foundational actions as envisioned under the 2010 Integrated Resources Plan (IRP) and MWD’s proposed funding program for these actions. In October 2010, the MWD board adopted a three-component IRP update aimed to triple insure it has the water to meet member agencies’ demands. The first component on this plan is MWD’s Core Resources Strategy, which outlines how MWD will develop adequate supplies to meet 100 percent of its projected dry-year demands. The second component is an “Uncertainty Buffer” that will develop up to 500,000 AF of additional regional supplies through local supply development projects and enhanced water-use efficiency. Foundational actions are alternative supply options – in addition to the “Uncertainty Buffer” supplies -- that have undergone feasibility studies, research, and regulatory review, so that these actions may be implemented if demands on MWD exceed supplies developed through both the Core Resources Strategy and Uncertainty Buffer. During the committee meeting, staff discussed four types of Foundational Actions projects including recycled water, seawater desalination, stormwater, and groundwater storage. Staff sought committee input on a funding program for technical studies
that advance the field of knowledge for such projects, provide results that can be utilized by other
member agencies, or help lay the groundwork for implementing such projects. Staff suggested that
funding be administered to member agencies through an Request for Proposal process that includes
a technical review committee. Member Agencies could receive up to $500,000 of MWD’s initial $3
million Foundational Actions budget and would be required to provide matching funds.

**Report on 2014 Water Bond.**
The Communications and Legislation Committee heard a report on the 2014 Water Bond, also
known as the Safe, Clean, and Reliable Drinking Water Supply Act. The Legislature approved this
$11 billion bond measure in 2009, which was part of the 2009 legislative package on water. The
bond would fund investments in water supply reliability, groundwater quality, Delta sustainability,
water recycling and conservation, storage to provide water for the coequal goals, and watershed
protection. Although polling at the time showed voters agreed that investments in water
infrastructure and environmental restoration enhancements were needed, the bond was moved from
California’s 2010 ballot to its 2012 ballot due to the State’s weak economic condition. The bond
was removed from the 2012 ballot in July 2012 to facilitate the passage of Governor Brown’s tax
measure. Staff described the California economy as “strengthening” and provided background on
the State’s debt affordability as well as existing State bond programs related to water resources
management. The 2014 Water Bond would provide funding to seven key areas: 1) Statewide water
system operational improvements, 2) groundwater protection and water quality, 3) water recycling
and conservation, 4) habitat conservation and watershed protection, 5) drought relief, 6) water
supply reliability, and 7) Delta sustainability. There are three spot bills proposed by Senators
Pavely, Rubio, and Wolk that would, respectively, reduce the bond, reduce and potentially refocus
the bond, and rescind the bond.

**The MWD Committees and Board also:**
- Appropriated $790,000, and authorized (1) preliminary design of seismic upgrades for the
  6.9kV switch houses at the Colorado River Aqueduct pumping plants and (2) $900,000
  agreement with Ninyo & Moore for environmental services (Approp. 15438);
- Received a report on MWD’s 2013 financing plans, which includes taking advantage of
  historically low interest fixed-rate bonds and securing financing for MWD’s Capital Investment
  Plan;
- Awarded $672,288.37 procurement contract to CDW to furnish data communication equipment;
- Appropriated $14.5 million and awarded $9,983,091 contract to J. F. Shea Construction, Inc. for
  filter surface wash upgrades at Module No. 1 of the Joseph Jensen Water Treatment Plant
  (Approp. 15542);
- Heard a Six-month Financial Review;
- Heard a report on Consolidated Delta Smelt Cases, USDC Case No. 1:09-CV-407 LJO-DLB;
  and Consolidated Salmonid Cases, USDC Case No. 1:09-CV-1053 LJO-DLB; and
- Heard a report on San Diego County Water Authority v. Metropolitan Water District of Southern
  California, et al., San Francisco County Superior Court Case No. CPF-10-510830 and No. CPF-
  12-512466.
Imported Water Committee
January 16, 2013
Page 3 of 3

**State Water Contractors (SWC).**
The SWC met on December 20, 2012. The Department of Water Resources (DWR) staff reported that a Thanksgiving Day fire (November 22) at an underground State Water Project pump and hydroelectric station west of the Thermolito Pumping-Generating plant is not expected to impact water deliveries. Staff said that water released from the Lake Oroville Dam is being diverted around the damaged pump-generating system. While, DWR reported that the extent of the damage is not yet known, the station is out of commission indefinitely. The facility produces about 5% of the State Water Project’s total electricity. DWR says additional power as needed will be purchased to compensate for the outage. Subsequent to the SWC meeting, MWD reported during this month's Engineering and Operations Committee meeting that as a result of the fire, the loss of power generation revenue and reduced ability to pump off-peak has an estimated energy cost impact to MWD between $15 million and $20 million.

DWR staff also reported on the SWP operations. A large storm hit the Sacramento River watershed around the beginning of December, which resulted in significant additional runoff into the Delta and very large inflows into Oroville Reservoir. Oroville Reservoir storage has increased by more than 500,000 acre-feet since late November and is now storing about 2.35 million acre-feet (as of December 20). Consequently, based on recent precipitation, runoff, and current water supply conditions, on December 21, DWR increased the 2013 SWP allocation from 30 percent to 40 percent of the SWCs’ 2013 requested Table A amounts, which total 4.172 million acre-feet.

The SWC also authorized the General Manager to contract with Nicholson & Olson to conduct the Fiscal Years 2011-12, 2012-13 and 2013-14 audits of the SWC; Nicholson & Olson has conducted SWC’s annual financial audits since its inception. At the request of members of the SWC, upcoming efforts by the SWC staff will include scheduling a conference call to discuss Multi-Year Water Transfers and preparing an analysis of the relative importance of different sources of increases in net State Water Project energy costs.

For additional SWC actions, see Attachment 1. The next meeting will be held on January 17, 2013.

Prepared by: Liz Mendelson, Assistant Water Resources Specialist
Reviewed by: Amy I. Chen, Director of MWD Program

Attachment 1: SWC Board Actions, December 20, 2012
STATE WATER CONTRACTORS
BOARD OF DIRECTORS
BOARD ACTIONS
DECEMBER 20, 2012

The following actions were taken at the State Water Contractors (SWC) Board of Directors December 20, 2012 meeting upon motions duly made, seconded and unanimously passed.

1. Approved the Consent Calendar, including Draft Board Minutes for November 15, 2012, the November Financial Reports, and November Consultant Reports.

2. Authorized the General Manager to engage Nicholson & Olson, CPA’s for three years to conduct the Fiscal Year 2011-12, 2012-13 and 2013-14 audit of the State Water Contractors.

3. Authorized the General Manager to contribute $10,000 to support ongoing litigation challenging the Santa Ana Sucker critical habitat designation.

4. Directed the General Manager to send a letter to DWR to communicate the Contractors preferences for potential Reid Gardner Unit 4 close-out activity.

Other Actions:

1. Requested that SWC staff schedule a conference call to discuss Multi-Year Water Transfers.

2. Requested that SWC staff prepare an analysis of the relative importance of different sources of increases in net State Water Project energy costs.
January 16, 2013

Attention: Imported Water Committee

Status of Purchase Order Extension with Metropolitan Water District. (Information)

Purpose
This report presents the status of Water Authority’s Amended and Restated Purchase Order with Metropolitan Water District.

Background
At the Water Authority’s November 29, 2012 board meeting, the board authorized the General Manager, with the concurrence of special counsel, to execute, under formal written protest, an extended purchase order (Amended and Restated Purchase Order) with Metropolitan Water District (MWD).

Pursuant to board direction, General Manager Stapleton on December 27, 2012 executed an Amended and Restated Purchase Order for System Water To Be Provided by The Metropolitan Water District of Southern California. On the same date, General Counsel Daniel Hentschke forwarded the signed agreement along with a protest letter (Attachment 1) to MWD via electronic mail and Federal Express.

On January 4, 2013, the Water Authority received a letter from MWD General Counsel Marcia Scully declining to finalize the execution of the purchase order extension. Scully’s letter is attached as Attachment 2.

On January 14, 2013, the Water Authority responded to MWD’s letter (Attachment 3).

This issue’s relation to the MWD rate litigation will be further discussed in closed session as part of item IV-4.

Prepared by: Amy Chen, Director of MWD Program
Reviewed by: Dennis A. Cushman, Assistant General Manager

Attachment 1: Water Authority’s protest letter with executed purchase order extension dated December 27, 2012
Attachment 2: MWD’s letter re purchase order extension dated January 4, 2013
Attachment 3: Water Authority’s letter re purchase order extension dated January 14, 2013
December 27, 2012

Mr. Gary Breaux
Assistant General Manager/Chief Financial Officer
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90065-0153

Re: “Amended and Restated Purchase Order for System Water to be Provided by the Metropolitan Water District of Southern California” (“Revised Purchase Order Form”)

Dear Mr. Breaux:

The Water Authority’s board of directors has authorized the General Manager to sign the enclosed Revised Purchase Order Form (Attachment 1): 1) UNDER PROTEST; and, 2) with a full RESERVATION OF RIGHTS. The basis of our objection has been stated in past correspondence from the Water Authority to Metropolitan on a variety of subjects, including, but not limited to, the October 8, 2012 letter from the Water Authority’s Metropolitan board representatives to MWD Chairman Foley and Board Members (RE: Board Memo 8-3 — Approve the form of the amended and restated Purchase Order; and authorize amendment of section 4122 of the Administrative Code), a copy of which is Attachment 2 to this letter.

Background

At the outset, in response to your October 30 letter responding on behalf of Metropolitan’s Chairman of the Board to Attachment 2 (your October 30 letter is Attachment 3), we wish to note for the record that neither the staff presentation nor committee discussion (which was de minimis) responded substantively to the Water Authority’s comments and concerns in the manner you describe in your letter. If anything, the presentation confirmed exactly the point the Water Authority was making, namely, that the extension of the purchase order was not according to “existing terms and conditions,” but rather, contained several revisions. Copies of the presentation and a transcript of the committee “discussion” are Attachments 4 and 5, respectively.

Also, while we appreciate receiving your personal explanation of the board’s action on the Compton purchase order withdrawal, we must respectfully disagree with both your description of the board’s action as well as your interpretation of Metropolitan’s Administrative Code Section 4404 (b). Contrary to the suggestion in your letter, Board Memorandum 8-3 (Consider City of Compton’s request to withdraw purchase order...
agreement) dated November 8, 2011 did not describe any general policy or “conditions” under which member agencies would be allowed to terminate purchase orders. It did, however, state expressly that, “If other member agencies request to withdraw their Purchase Order commitment, the same conditions for Tier 1 and Tier 2 payments and the administrative withdrawal fee would apply.” That statement is fully consistent with Section 4404 (b)'s requirement that all purchase orders shall be on “substantially the same terms and for the same term.” The characterization in your letter turns Section 4404 (b) on its head by suggesting that the board has discretion to treat individual member agencies differently under “contracts,” as opposed to broadly applicable board policy.

The reasons for our concern are obvious: we are already in litigation over Metropolitan’s use of contracts to discriminate against the Water Authority and its ratepayers. The Water Authority has also disputed Metropolitan’s characterization of “System Water” because it is an artifice designed by Metropolitan in an attempt to immunize itself from statutory and constitutional requirements to charge its member agencies no more than the actual, reasonable and proportional cost of the services it provides.

Through litigation discovery and documents obtained through Public Records Act Requests, the Water Authority is now aware of the plans by Metropolitan and some of its member agencies to play “gotcha” with the Water Authority through the use of phony contracts that the board may choose to enforce – or not – selectively.

Additional Comments
1. Execution of the purchase orders at this time is the ultimate act of form over substance, since 20 of the 23 member agencies with existing purchase orders, including the Water Authority, have already purchased more water than they are “committing” to buy in the Revised Purchase Order.

2. The purchase order is an illusory contract with no real consideration exchanging hands: Metropolitan has no duty to deliver water and the member agencies make no real commitment to pay the significant costs Metropolitan incurs to pay for its water supply, facilities and other programs.

3. There is no evidence to support the purchase order’s recital that Metropolitan is relying on the purchase orders in setting its rates and charges, in planning and providing capital facilities or in developing water supply, management and reliability programs. Indeed, there is a complete disconnect between these processes and the purchase orders.

4. We have disputed in court the purchase order’s recital that the purchase order is “entered into for the direct benefit of the holders and owners of Metropolitan’s bonds.” Inclusion of this language is merely a litigation ploy by which Metropolitan is attempting to immunize its water rates from legal challenge.
5. Contrary to the recitals, the purchase orders are not the product of negotiation and do not represent terms and conditions that are “mutually agreed by the parties.” Metropolitan’s member agencies have no alternative but to pay the water rates and charges imposed by Metropolitan for the services it provides, including rates and charges for the use of transportation facilities over which Metropolitan has monopoly control.

6. The Water Authority disputes that the Metropolitan board has complete discretion based on a majority vote to cut special deals with some agencies to the detriment of others. Metropolitan may not, through the use of “contracts,” immunize itself from statutory and constitutional requirements that it charge only the actual, reasonable and proportional cost of the services it provides.

Finally, I am attaching and incorporate by reference a copy of the Water Authority’s November 21, 2012 board memorandum on Metropolitan’s purchase order history (Attachment 6). This memorandum discusses Metropolitan’s complete failure over more than the past five years to develop a long term finance plan to pay for Metropolitan programs. The memorandum also discusses how the use of purchase orders has – by your own admission – failed to achieve the intended objective of providing Metropolitan an increased share of firm revenues to better match its fixed costs.

In summary, the Water Authority board has authorized the General Manager to execute the Revised Purchase Order Form: 1) UNDER PROTEST; and, 2) with a full RESERVATION OF RIGHTS, as stated above.

Sincerely,

Daniel S. Hentschke
General Counsel

cc: Metropolitan Water District Board of Directors
San Diego County Water Authority Board of Directors

Attachment 1: Revised Purchase Order Form
Attachment 2: Water Authority’s MWD Delegates Letter, dated October 8, 2012
Attachment 3: MWD’s response, dated October 30, 2012
Attachment 4: MWD’s October 8 Presentation on Purchase Order extension
Attachment 5: MWD’s October 8 Purchase Order discussion transcript
Attachment 6: Water Authority’s Board Memo on MWD Purchase Order History, dated November 21, 2012
AMENDED AND RESTATED
PURCHASE ORDER FOR SYSTEM WATER TO BE PROVIDED BY
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

| PURCHASER: SAN DIEGO COUNTY WATER AUTHORITY | TERM  
12 years |
<table>
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<tr>
<td>INITIAL BASE FIRM DEMAND: 557,095.1 acre-feet</td>
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<tr>
<td>PURCHASE ORDER COMMITMENT: 4,011,085.0 acre-feet</td>
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Definitions of capitalized terms used in this Purchase Order are provided in Attachment 1. Terms used in this Purchase Order and not defined in Attachment 1 are defined in Metropolitan’s Administrative Code.

COMMITMENT TO PURCHASE.
In consideration of Purchaser’s commitment to purchase System Water pursuant to this Purchase Order, Metropolitan agrees to sell such System Water to Purchaser at the Tier 1 Supply Rate each year in an amount up to the Tier 1 Annual Maximum. System Water sold to Purchaser (excluding deliveries of interruptible water, including but not limited to the Interim Agricultural Water Program, Long-Term Seasonal Storage Service and Replenishment Service) in an amount greater than the Tier 1 Annual Maximum shall be sold to the Purchaser at the Tier 2 Supply Rate. In connection with the receipt of System Water, the Purchaser also agrees to pay all other applicable rates and charges, as established by Metropolitan from time to time in accordance with Section 4304 of the Administrative Code. The rates and charges applicable to System Water as of the Effective Date are shown in Attachment 2.

Purchaser agrees to purchase System Water from Metropolitan during the Term in an amount (excluding deliveries of interruptible water, including but not limited to the Interim Agricultural Water Program, Long-Term Seasonal Storage Service and Replenishment Service) not less than the Purchase Order Commitment.

Purchaser recognizes and agrees that Metropolitan has relied and will, during the term of this Purchase Order, rely on this commitment by Purchaser in setting its rates and charges, planning and providing its capital facilities and developing its water supply, management and reliability programs. If Purchaser's applicable System Water purchases during the Term are less than the Purchase Order Commitment, Purchaser agrees to pay Metropolitan an amount equal to the difference between the Purchase Order Commitment and Purchaser's applicable System Water purchases during the Term times the average of the Tier 1 Supply Rate in effect during the Term. The Purchaser agrees to pay such amount to Metropolitan within the next regular billing cycle following the reconciliation of all certifications for special programs that the Purchaser may participate in (e.g. Interim Agricultural Water Program, Long-term Seasonal Storage Service). The Purchaser may elect to pay such amount in twelve equal monthly payments over the course of the next twelve months beginning with the first regular billing cycle.
following the reconciliation of all outstanding certifications for special programs. If the Purchaser elects to pay such amount over the course of the next twelve months following the regular billing cycle any outstanding balance shall bear interest at Metropolitan’s then current investment portfolio average yield. All other amounts payable under this Purchase Order shall be billed and paid in accordance with the Administrative Code.

The Purchaser further recognizes that this Purchase Order is entered into for the direct benefit of the holders and owners of Metropolitan’s Bonds issued from time to time under the Act and the Bond Resolutions, and the income and revenues derived from this Purchase Order will be pledged for the purposes set forth in the Bond Resolutions, including the payment of principal of and interest on such Bonds.

RENEWAL:

Prior to but not later than December 31, 2010, the Purchaser may provide a non-binding written notice to Metropolitan of the Purchaser’s determination to extend this Purchase Order. Upon the receipt of such notice, the Board of Directors of Metropolitan (the “Board”) shall determine whether Metropolitan will continue to provide System Water to member agencies by Purchase Order. If the Board so determines, the Purchaser and Metropolitan shall amend this Purchase Order to include an extended term and/or to include such other terms and conditions as may be mutually agreed by the parties. If the Purchaser elects not to renew this Purchase Order it will terminate upon the expiration of the Term.

WATER SERVICE:

Conditions of water service by Metropolitan to the Purchaser, including but not limited to (i) delivery points, (ii) water delivery schedules, and (iii) water quality, will be determined in accordance with Chapter 5 (Section 4500 through 4514, inclusive, as applicable) of Metropolitan’s Administrative Code.

In accordance with its Administrative Code, Metropolitan shall use its reasonable best efforts to supply System Water in the quantities requested by the Purchaser, but is not obligated to dedicate any portion of System capacity for the conveyance, distribution, storage or treatment of System Water for the benefit of the Purchaser or any other member agency. Metropolitan shall use its reasonable best efforts to deliver the Firm Demand when needed by the Purchaser during the Term; provided however, there shall be no default under this Purchase Order if Metropolitan fails to deliver water to the Purchaser in accordance with any such schedule of deliveries during the Term.

By execution of this Purchase Order, the Purchaser recognizes and agrees that it acquires no interest in or to any portion of the System or any other Metropolitan facilities, or any right to receive water delivered through the System, excepting the right to purchase up to Purchaser’s Tier 1 Annual Maximum at the Tier 1 Supply Rate provided that System Water is available. This Purchase Order governs pricing of the System Water delivered to the Purchaser pursuant to this Purchase Order and does not confer any entitlement to receive System Water.

System Water provided to the Purchaser under the terms of this Purchase Order shall be subject to reduction in accordance with the shortage allocation provisions of the Water Surplus and Drought Management Plan (the “WSDM Plan”) or other such policies and principles governing the allocation of System Water as adopted by the Board.

In the event that Metropolitan's Board determines to reduce, interrupt or suspend deliveries of System Water, any outstanding balance of the Purchase Order Commitment at the end of the Term shall be reduced by the reduction in System Water made available to the Purchaser under this Purchase Order.
MISCELLANEOUS:

This Purchase Order will be interpreted, governed and enforced in accordance with the laws of the State of California.

This Purchase Order will apply to and bind the successors and assigns of the Purchaser and Metropolitan.

No assignment or transfer of the rights of the Purchaser under this Purchase Order will be valid and effective against Metropolitan or the Purchaser without the prior written consent of Metropolitan and the Purchaser.

If at any time during the Term, by reason of error in computation or other causes, there is an overpayment or underpayment to Metropolitan by the Purchaser of the charges provided for under this Purchase Order, which overpayment or underpayment is not accounted for and corrected in the annual re-determination or reconciliation of said charges, the amount of such overpayment or underpayment shall be credited or debited, as the case may be, to the Purchaser. Metropolitan will notify the Purchaser in writing regarding the amount of such credit or debit, as the case may be. In no case will credits or debits for charges provided for under this Purchase Order be administered beyond the limit for billing adjustments as specified in Metropolitan's Administrative Code.

IN WITNESS WHEREOF, this Amended and Restated Purchase Order is executed by the duly authorized officers of the Metropolitan Water District of Southern California and San Diego County Water Authority, as of December 27, 2012.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

By:___________________________

Jeffrey Kightlinger
General Manager

SAN DIEGO COUNTY WATER AUTHORITY

By:___________________________

[Title] General Manager

APPROVED AS TO FORM AND CONTENT:

________________________________________
General Counsel

________________________________________
General Counsel

By:___________________________

By:___________________________
DEFINITIONS

"Act" means the Metropolitan Water District Act, California Statutes 1969, Chapter 209, as amended and supplemented from time to time.

"Base Firm Demand" means the greater of (i) the Initial Base Firm Demand Post IAWP or (ii) the ten-year rolling average of the Purchaser's Firm Demand, measured on a fiscal year basis.

"Bonds" means water revenue bonds or notes issued under the Bond Resolutions.

"Bond Resolutions" means Resolution No. 8329 or Resolution No. 8322, both as amended and supplemented, or any other resolution authorizing the issuance of bonds, notes or other obligations secured by Metropolitan's water sales revenues.

"Effective Date" means the effective date of this Purchase Order as specified above.

"Firm Demand" means the Purchaser's purchases of non-interruptible System Water supplies, including full service, seasonal shift, Conjunctive Use Program, Surface Storage Operating Agreement water, Recharge and Recovery Operating Agreement water, or any other water program deemed to be a firm delivery of water.

"Initial Base Firm Demand" means the Purchaser's highest annual Firm Demand on Metropolitan in any fiscal year during the period from fiscal year 1989/90 through fiscal year 2001/02. In accordance with procedures set forth in Metropolitan's Administrative Code, the Initial Base Firm Demand will be revised to reflect certified and verified deliveries under the Interim Agricultural Water Program and Long-term Seasonal Storage Service Program as such certifications affect the Initial Base Firm Demand.

"Initial Base Firm Demand Post IAWP" means the Purchaser's highest annual delivery of water from the District, excluding water delivered under Long-Term Seasonal Storage Service and other deliveries of interruptible water but including Interim Agricultural Water Program deliveries, during any fiscal year from fiscal year 1989/90 through fiscal year 2001/02.

"Metropolitan" means The Metropolitan Water District of Southern California.

"Purchase Order Commitment" means 60% of the Initial Base Firm Demand times 12. Deliveries of System Water made under the Interim Agricultural Water Program and Long-Term Seasonal Storage Service will not count toward the Purchase Order Commitment.

"Purchase Order" means this Amended and Restated Purchase Order for System Water.

"Purchaser" means the member public agency specified above, a duly organized [city/water district/county water authority] of the State of California.

"System" means the properties, works and facilities of Metropolitan necessary for the supply, development, storage, conveyance, distribution, treatment or sale of water.
"System Water" means water supplies developed by Metropolitan and delivered to the Purchaser through the System or other means (e.g. conjunctive use storage).

"Term" means the term of this Purchase Order as specified above.

"Tier 1 Annual Maximum" means an amount equal to 90% of the Base Firm Demand.

"Tier 1 Supply Rate" means Metropolitan's per-acre-foot Tier 1 Supply Rate, as determined from time to time by Metropolitan's Board of Directors. The initial Tier 1 Rate is $73/AF.

"Tier 2 Supply Rate" means Metropolitan's per-acre-foot Tier 2 Supply Rate, as determined from time to time by Metropolitan's Board of Directors. The initial Tier 2 Rate is $154/AF.

"Water Surplus and Drought Management Plan (WSDM)" means Metropolitan's policy and procedures for managing supplies and drought conditions as adopted by the Board from time to time.
### Attachment 2

**Amended and Restated Purchase Order for System Water Rates and Charges**

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October 8, 2012

Jack Foley, Chair of Board
and Members of the Board
Metropolitan Water District
P. O. Box 54153
Los Angeles, CA 90065-0153

RE: Board Memo 8-3 – Approve the form of the amended and restated Purchase Order; and authorize amendment of section 4122 of the Administrative Code

Dear Mr. Foley and Board Members,

We have reviewed Board Memo 8-3 including Attachments. We are prepared to recommend to the Water Authority board of directors renewal of the purchase order commitment for two years, to December 31, 2014, “under the existing terms and conditions,” in accordance with the recommendation stated in the “Executive Summary” at page one, paragraph one of the board memo and as reflected in Attachment 3, Page 1 of 1, 2013, Tier 1 Limit and 2003 – 2014 Purchase Order Commitment. However, we are unable to recommend execution of the new form of Purchase Order which contains unexplained changes to the existing terms and conditions.

The “Details” section at page one, paragraph two of the board memo states that the new form of agreement contains amendments to definitions “to align the Purchase Orders with water programs implemented since the 2002 execution of the Purchase Order.” However, there is no explanation provided of the “alignment.” In fact, none of the definitional changes are necessary in order to achieve the stated objective of extending the purchase order for an additional two years under the existing terms and conditions or to “align” the Purchase Order to “new water programs.” The extension of the purchase order commitment could be accomplished simply by amending Section 4122 and the Purchase Order to reflect a “twelve-year” instead of a “ten-year” rolling average of deliveries of water (subject to adding one additional board policy change noted below).

Instead of presenting this simple amendment, however, an “amendment and restatement” of the Purchase Order is proposed. A contract amendment does not replace the whole original contract (just the part that’s changed by the amendment, here, a simple change from ten-years to twelve-years). Only when a contract requires extensive changes is it the common practice to create an entirely new agreement in the form of an “amendment and restatement.”

For example, a number of terms that are not defined in Metropolitan’s Administrative Code or included in its cost of service analysis are used in the new form of Purchase Order (e.g., “non-interruptible System Water supplies,” and “Recharge and Recovery Operating Agreement...
Mr. Foley and Members of the Board  
October 8, 2012  
Page 2

water,” among others). The edits to the definitions are unnecessary and whatever the intent, the proposed amendments are inconsistent with the explanation being provided by staff that the Purchase Orders are being extended under the “existing terms and conditions.”

Finally, while staff has included a number of unexplained changes to the form of the Purchase Order, it has left out the only policy change that has actually been adopted by the board of directors. That is that any member agency may withdraw and terminate its Purchase Order commitment upon the payment of a $5,000 administrative withdrawal fee. See November 8, 2011 Board Memorandum 8-3, adopted by the board on the same date. This provision should be included in the amended Purchase Order commitment.

In closing, we reiterate the concerns expressed in our September 10, 2012 letter to you RE Update on Rate Refinement (Board Information Item 7-b) (copy attached) including the inefficacy of Metropolitan’s Purchase Orders to achieve the objective of securing a revenue stream sufficient to pay Metropolitan’s costs, or, to provide a reasonable basis for the planning and provision of long term capital facilities and water supply programs. Metropolitan’s staff has acknowledged that Purchase Orders do not achieve these objectives, and yet, these critical financial decisions are being deferred for another two years. We are troubled by the continued spending patterns and practices at Metropolitan which do not provide sufficient fixed revenues at the same time the member agencies and board members are unable to agree how these fixed costs will be paid for over the long term. The trend and signals that we see are that Metropolitan’s member agencies intend to purchase less, not more water from Metropolitan. The continued spending could result in substantial stranded costs as well as massive rate hikes that would be necessary to pay for these programs with a declining sales base.

We assume other agencies will be required to obtain the approval of their governing boards. Our recommendations to the Water Authority’s board of directors will be as described in this letter.

Sincerely,

Keith Lewinger  
Director

Fern Steiner  
Director

Doug Wilson  
Director

Attachment

cc: San Diego County Water Authority Board of Directors
September 10, 2012

John V. Foley, Chairman
and Members of the Board of Directors
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

RE: Update on “Rate Refinement” (Board Information Item 7-b)

Dear Mr. Foley and Members of the Board:

The board will be receiving yet another abbreviated, non-substantive report on “Rate Refinement” at this month’s board meeting. This month, staff is recommending a two-year extension of the Purchase Orders in spite of the fact that, less than two months ago, staff had concluded and reported to the board that the use of Purchase Orders failed to meet the board’s articulated objective of providing for an annual assured revenue stream sufficient to pay Metropolitan’s costs.

Staff recommendation, apparently driven by the continued unwillingness of the member agency managers to make any financial commitments to pay Metropolitan costs, is to once again “punt” any further board deliberation or discussion until 2013. This month’s power point presentation – the only information being provided to the board of directors – says that there just isn’t enough time to evaluate the most recent new idea to pay for Metropolitan projects, even though the discussions have been underway since mid-2007. Extension of the Purchase Orders creates the appearance of an interim solution but is in substance, nonsensical.

“Shifting” discussions about discounted water sales to the Water Planning and Stewardship Committee will not change the fact that there are important fiscal implications from the sale of discounted water that must be, but are not presently accounted for in Metropolitan’s cost of service. Indeed, no replenishment service was included in the biennial budget or taken into account in setting water rates and charges adopted by the board for the 2013 and 2014 fiscal years. Changing the label on or process to secure discounted water will not change the fact that there are cost of service and water rate implications that are required to be addressed by the board as part of its rate-setting process.

Finally, “Rate Refinement” is an artifice. This lingo, as well as other “housekeeping” and Administrative Code changes have all been designed to perpetuate the myth that Metropolitan’s “rate structure” has remained unchanged. In the final analysis, the facts will...
speak for themselves and there will be no question but that there have been and continue to be implemented by Metropolitan, board actions that affect how Metropolitan’s costs are being paid without regard to who benefits.

Attached is a copy of our July 9, 2012 letter regarding Update on Rate Refinement Discussions, along with Director Wilson’s August 16, 2012 letter to the Chief Financial Officer, which we incorporate by reference. While we were surprised by the CFO’s recent letter advising Director Wilson that all of these issues had been presented by the professional staff and discussed by the board, we will review our notes to see if there are board memoranda we have overlooked or meetings we have failed to attend and will be back in touch with you on that point.

Sincerely,

Lynne Heidel
Director

Keith Lewinger
Director

Fern Steiner
Director

Doug Wilson
Director

Attachment 1: Letter regarding Rate Refinement, July 9, 2012
Attachment 2: Letter from Director Wilson to Chief Financial Officer, August 16, 2012
July 9, 2012

Jack Foley
Chairman
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

RE: Update on Rate Refinement Discussions (Finance & Insurance Committee Item 7-a)

Dear Mr. Foley:

We have reviewed the PowerPoint presentation to the Finance & Insurance Committee, item 7-a, July 9, 2012 RE Update on Rate Refinement Discussions (the PowerPoint). After waiting more than five years – since the Long Range Finance Plan (LRFP) subgroup of member agency managers was formed in mid-2007 to discuss Metropolitan’s Long Range Finance Plan and “Rate Refinement” – we believe the recommendations described in the PowerPoint fail to address the right priorities or solutions for Metropolitan.

Metropolitan’s revenues have been insufficient to pay its expenses in five out of the last six years. Revenue stability and certainty should be a priority, and we agree with the belated conclusion now reached by Metropolitan staff and the member agency managers that the use of purchase orders has failed to meet this board objective over the past ten years. During this time, Metropolitan’s fiscal stability has continued to deteriorate. “Use of the current rate structure” (however that is defined) will not address Metropolitan’s need for revenue stability and cannot be relied upon to ensure that there will be a source of revenue for the multi-billion investments in the Delta and otherwise that Metropolitan is planning to make.

Rather than accepting the narrow “priorities” identified by staff and the member agency managers, we request that a board workshop be scheduled as part of next month’s Finance & Insurance Committee meeting to consider the elements and priorities of a Long Range Finance Plan for Metropolitan – a plan that is now long overdue. Metropolitan should not continue to spend money on water supply projects without evidence describing the need for these projects, and its member agencies unwilling to pay for them over the long term. We ask that the subject of take-or-pay contracts be considered by the board of directors, along with any and all other proposed alternatives to reasonably ensure Metropolitan’s recovery of sufficient revenues to pay its future costs and avoid stranded investments.

At a workshop, the board could consider all issues associated with a Long Range Finance Plan.
Plan, including whether there is any support for ad valorem tax increases and any staff proposals to address the appropriate allocation of all standby service costs (not just treated water). We have distributed to the managers and attach to this letter a slide that depicts projected dry-year peaking by the Los Angeles Department of Water and Power, based on its Urban Water Management Plan. The staff’s recent recommendation that all member agencies “share” this cost is not acceptable to the Water Authority because these costs are required to be charged to and paid by the member agencies that benefit from Metropolitan’s expenditures to provide this service. The Water Authority expects to pay the costs associated with its own peaking – as all agencies should – but cannot and will not ask our ratepayers to “share” the costs of providing service to other agencies.

We ask that the board of directors take this issue up at the proposed workshop along with all other issues proposed for consideration by members of the board.

Sincerely,

Lynne Heidel  
Director

Keith Lewinger  
Director

Fern Steiner  
Director

Doug Wilson  
Director

cc: Metropolitan Board of Directors

Attachment: LADWP Historic & Projected Water Purchases from MWD
LADWP Historic & Projected Water Purchases from MWD

*Source: MWD Online Operations (1990-2007) and WINS Table A Report (2008-2011)
**Source: LADWP 2010 Urban Water Management Plan
August 16, 2012

Gary Breaux
Chief Financial Officer
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Re: Rate Refinement Workshop

Dear Gary,

I wanted to give you some of my thoughts on the issues the rate refinement board workshop should include on MWD's finance plan and water rates. The “big picture” was described in the July 9, 2012 letter the San Diego board members sent to Chairman Foley requesting the workshop. That letter included concern for MWD financial stability given the high fixed costs versus low fixed revenues and questions how MWD will ensure sufficient revenues to pay its future costs and avoid stranded investments. Chairman Foley indicated that a workshop would be held. To assist in your preparation for the workshop, I went back through some of the other letters we have written to MWD on issues of concern and I thought it might help you to provide a short list of some of the key questions.

1. How can MWD execute a long term contract for the BDCP unless it has an assured source of revenue to make the payments?
2. Are ad valorem tax increases on a regular basis a real possibility? If so, what steps need to be taken to advance that approach? And, could this be the realistic solution to fund the BDCP?
3. Will the member agencies agree to sign take-or-pay contracts? If not, isn’t MWD being asked to carry all of the risk of stranding the BDCP and other investments? Is that a reasonable risk for our board to agree to assume?
4. What will happen if MWD’s sales continue to decline at the same time we continue to embark on new projects? How will MWD’s liabilities be paid? What legal mechanism exists to recover stranded costs? Will MWD be required to sign so-called “step up” agreements on the remaining ratepayers could have to cover if the other State Water Contractors default?
5. Are peaking costs being adequately charged and collected under the current rate structure? With so many MWD costs being incurred to meet dry-year peaking demands (not just for treated water), what mechanisms can MWD put in place in order to send the right price signal to ensure that agencies generating peaking costs are in fact paying those costs? Our calculations show that the current capacity and RTS charges do not fully recover these peaking costs.
6. In light of reduced sales projections, does it make sense for MWD to continue to pay its member agencies to NOT buy MWD water?
7. Given that the 20% by 2020 requirement is a retail requirement, and that MWD sales are down by more than 30%, does it make sense for MWD to continue to make current investments in water conservation? Or, should it defer those investments until sales begin to improve? Why hasn’t our adaptive IRP adapted to reduced sales?

8. If MWD is going to make additional investments in water conservation, shouldn’t it reduce the amount of money it is spending on other water supplies by a like amount?

9. How will MWD ensure that its revenues are in fact sufficient to meet its operating expenses over the next five years? At my local agency at Padre Dam, we call this “living within the household budget”. That is to say that expense is reduced to match the long term revenue stream, not the reverse.

10. What are the risks associated with projecting water sales based on “average” pricing? Will groundwater agencies buy as much water from MWD if it isn’t discounted? Will other agencies pay more in order to subsidize discounted water sales especially as agencies develop new local supplies reducing their dependence on Met?

11. Given all of the changed circumstances, including the increasing cost of MWD water, is it reasonable to rely on historical data in projecting future water sales?

There are other issues and questions but this is a pretty good list of the issues I see that the Water Authority has raised over the past couple of years. We look forward to working with you and our fellow board members to ensure MWD’s future and long term fiscal sustainability.

Sincerely,

Doug Wilson
Director

Attachments (without original enclosures):
1. July 9, 2012 re: Update on Rate Refinement Discussions
2. July 22, 2012 re: Board item 8-3 (LRP)
3. May 7, 2012 re: Board item 8-4 (conservation program)
4. March 21, 2012 re: Recommendation to cap MWD rate increases at 3%
5. March 12, 2012 re: LRPs
6. February 13, 2012 re: Board item 8-2 (draft remarketing statement)
7. February 3, 2012 re: Biennial budget
8. December 13, 2011 re: SB60
9. November 4, 2011 re: Board item 8-8 (discounted replenishment program)
10. October 25, 2011 re: KPMG audit report
11. October 7, 2011 re: WP&S items
13. August 16, 2011 re: Member agency willingness to sign take-or-pay contracts
14. May 6, 2011 re: Board item 5-2 (sale of discounted water)
15. December 9, 2010 re: Draft official statement
16. September 22, 2010 re Draft official statement
July 9, 2012

Jack Foley
Chairman
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

RE: Update on Rate Refinement Discussions (Finance & Insurance Committee Item 7-a)

Dear Mr. Foley:

We have reviewed the PowerPoint presentation to the Finance & Insurance Committee, item 7-a, July 9, 2012 RE Update on Rate Refinement Discussions (the PowerPoint). After waiting more than five years – since the Long Range Finance Plan (LRFP) subgroup of member agency managers was formed in mid-2007 to discuss Metropolitan’s Long Range Finance Plan and “Rate Refinement” – we believe the recommendations described in the PowerPoint fail to address the right priorities or solutions for Metropolitan.

Metropolitan’s revenues have been insufficient to pay its expenses in five out of the last six years. Revenue stability and certainty should be a priority, and we agree with the belated conclusion now reached by Metropolitan staff and the member agency managers that the use of purchase orders has failed to meet this board objective over the past ten years. During this time, Metropolitan’s fiscal stability has continued to deteriorate. “Use of the current rate structure” (however that is defined) will not address Metropolitan’s need for revenue stability and cannot be relied upon to ensure that there will be a source of revenue for the multi-billion investments in the Delta and otherwise that Metropolitan is planning to make.

Rather than accepting the narrow “priorities” identified by staff and the member agency managers, we request that a board workshop be scheduled as part of next month’s Finance & Insurance Committee meeting to consider the elements and priorities of a Long Range Finance Plan for Metropolitan – a plan that is now long overdue. Metropolitan should not continue to spend money on water supply projects without evidence describing the need for these projects, and its member agencies unwilling to pay for them over the long term. We ask that the subject of take-or-pay contracts be considered by the board of directors, along with any and all other proposed alternatives to reasonably ensure Metropolitan’s recovery of sufficient revenues to pay its future costs and avoid stranded investments.

At a workshop, the board could consider all issues associated with a Long Range Finance Plan.
Plan, including whether there is any support for ad valorem tax increases and any staff proposals to address the appropriate allocation of all standby service costs (not just treated water). We have distributed to the managers and attach to this letter a slide that depicts projected dry-year peaking by the Los Angeles Department of Water and Power, based on its Urban Water Management Plan. The staff’s recent recommendation that all member agencies “share” this cost is not acceptable to the Water Authority because these costs are required to be charged to and paid by the member agencies that benefit from Metropolitan’s expenditures to provide this service. The Water Authority expects to pay the costs associated with its own peaking – as all agencies should – but cannot and will not ask our ratepayers to “share” the costs of providing service to other agencies.

We ask that the board of directors take this issue up at the proposed workshop along with all other issues proposed for consideration by members of the board.

Sincerely,

Lynne Heidel  
Director

Keith Lewinger  
Director

Fern Steiner  
Director

Doug Wilson  
Director

cc: Metropolitan Board of Directors

Attachment: LADWP Historic & Projected Water Purchases from MWD
LADWP Historic & Projected Water Purchases from MWD

*Source: MWD Online Operations (1990-2007) and WINS Table A Report (2008-2011)

**Source: LADWP 2010 Urban Water Management Plan
June 11, 2012

John V. Foley, Chairman
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Re: Board Item 8-3 -OPPOSE
Authorize entering into a Local Resources Program agreement with Municipal Water District of Orange County and the city of San Clemente for the San Clemente Recycled Water System Expansion Project. (WP&S)

Mr. Foley and Members of the Board,

The Water Authority OPPOSES Board Item 8-3 on the following grounds:

Under California law including Proposition 26, MWD is required to set water rates that do not exceed the reasonable costs of providing the particular service for which the rate is charged, and that are equitable, fair and non-discriminatory. MWD has failed to present in Board Memo 8-3, by reference to its outdated Integrated Resources Plan (IRP), even more outdated 2007 LRP “target” or otherwise, any showing that MWD’s payments for this local water supply project will benefit any ratepayers other than those of the city of San Clemente, which will own the water supply. There is no demonstration that any water supply or transportation costs are avoided by MWD as a result of these payments. The bald assertion in Board Memo 8-3 that, “the project would strengthen regional water supply reliability” is insufficient to meet the requirements of California law.

Far from benefitting ratepayers of other member agencies, MWD’s continued payment of these subsidies under current circumstances harms all other MWD water ratepayers by further reducing demand for MWD water, thereby reducing MWD’s own revenues and driving up the cost of its water purchased by customers of other MWD member agencies. Moreover, MWD staff’s continued recommendations to approve subsidy agreements is inconsistent with its own actions months ago to suspend its “Local Resource Development Strategy Task Force” in order to reexamine the merits of the program and the water demand projections upon which it is based.

MWD’s expenditures have exceeded its revenues in three out of the past four years because water sales are down by more than 30% since the 2010 IRP was adopted, let alone the 2007 LRP “target” for local resources development. Rather than respond to these changed circumstances (consistent with the IRP’s articulated “adaptive management”), MWD is consciously choosing to rely on outdated water supply and financial planning that assume bloated water demands that do not exist and are not reasonably projected to exist in the foreseeable future.

A public agency providing a safe and reliable water supply to the San Diego region
In addition to these grounds, the Water Authority objects to being charged a “Water Stewardship Rate” (WSR) to pay for this project because its ratepayers have been barred by the MWD board’s August 2010 action from receiving any WSR benefits. Accordingly, the WSR is discriminatory, violates California law and may not be collected from the Water Authority’s customers.

As part of the lawsuit it has filed challenging MWD’s 2013 and 2014 water rates, the Water Authority is seeking to be relieved of any financial responsibility for this and other WSR projects approved by the MWD board of directors, so that the agencies that do not object may pay for these projects. As stated previously, the Water Authority has no objection if other MWD member agencies want to “pool” their money, however, that activity must be voluntary and not part of the water rates imposed by MWD on the ratepayers of all of its member agencies.

Sincerely,

Lynne Heidel  
Director

Keith Lewinger  
Director

Fern Steiner  
Director

Doug Wilson  
Director

cc: Jeff Kightlinger, MWD General Manager  
San Diego County Water Authority Board of Directors and Member Agencies

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1 Attachment 3 to Board Memo 8-3 states in a footnote that, “IRP studies show reduced long-term costs to the region when local resources are developed due to downsizing or deferral of Metropolitan’s capital improvements, reduction in operating costs for importation, treatment and distribution, and reduction in costs for developing alternative regional supplies. These benefits are realized by all Metropolitan member agencies through improved regional water supply reliability.” However, there is no evidence to support this broad claim, which is insufficient in any case to meet the requirements of California law including but not limited to Proposition 26.

ii See February 14, 2012 Board Letter 8-2, page 60, note 5.
May 7, 2012

John V. Foley, Chairman
and Members of the Board of Directors
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Re: Board Memo 8-4 – OPPOSE
Authorize changes to water conservation incentives (subsidies) as described

Dear Mr. Foley:

The Water Authority and its member agencies have a long and proud record of leadership in water conservation planning and implementation, based on strategic initiatives that will continue to reduce the region’s reliance on imported water supplies at an affordable cost. Given MWD’s role as a supplemental wholesale water provider – and taking into account the state mandate for 20% water conservation by 2020 at the retail level – the San Diego delegation does not support Agenda Item 8-4, to provide additional “incentives” to encourage water conservation. We have written to you and the board many times on this subject (reference to past correspondence is included below but not attached), so we provide only the following brief summary of the basis of our analysis.

Due to reduced demand for MWD water – and associated higher water rates – there is no need for MWD to pay subsidies to encourage water conservation at the wholesale level. Water sales are already down at MWD by more than 30%. When sales are reduced, water rates go up as ratepayers are forced to pay more for using less water. As outlined in our March 21 letter to you and the rest of the board, it is time to stop punishing water use efficiency efforts by Southern California ratepayers who are already paying for water use efficiency programs at the retail level to meet the 20x2020 mandate.

The Water Stewardship Rate which is collected to pay for MWD conservation subsidies violates California law. The Water Stewardship Rate does not fairly apportion or reflect the actual, reasonable and proportionate costs of the services for which the rate is imposed. The Water Stewardship Rate violates the legal requirements of MWD’s principal act, Proposition 13 and the statutes implementing it, Government Code § 54999.7, the California common law of utility rate-making and Proposition 26. The Water Authority has provided MWD with detailed analyses by expert consultants establishing that the Water Stewardship Rate is legally defective.

A public agency providing a safe and reliable water supply to the San Diego region
Mr. Foley and Members of the Board  
May 7, 2012  
Page 2  

The so-called “Rate Structure Integrity” clause adopted and imposed on the Water Authority by the MWD board of directors precludes any possible benefit to San Diego ratepayers from many MWD conservation programs. The board memorandum does not disclose that San Diego ratepayers are precluded from participating in MWD subsidy programs to the same extent as other MWD member agencies. We request that you include information in future board memoranda to fully disclose that information.

From a water resource planning, budget and policy point of view, we strongly encourage MWD to develop and implement a water conservation program that is better suited to its role as a wholesale water provider, that is based upon a calculable demonstration of need and avoided water supply cost (e.g., reduced take from the Delta, elimination of subsidies for member agency seawater desalination, etc.). Unfortunately, rather than viewing water use efficiency as a key part of its water resource plan and cost containment strategy – as recommended by the Water Authority for many years and by NRDC in its April 6, 2012 letter to you – MWD continues to limit itself to subsidy programs that are more appropriate at the retail level where the statewide conservation mandate has been imposed.

Sincerely,

Lynne Heidel  
Keith Lewinger  
Fern Steiner  
Doug Wilson  
Director  
Director  
Director  
Director  

cc: Ed Osann, NRDC Senior Policy Analyst

Past correspondence to MWD RE water conservation programs and subsidies:

- August 16, 2010 letter on MWD staff analysis on opt-in/opt-out conservation program
- November 29, 2010 comments on MWD draft Long Term Conservation Plan (LTCP)
- July 20, 2011 comments on LTCP working draft Version 11
- August 15, 2011 letter opposing LTCP and revised policy principles
- November 13, 2011 letter RE turf replacement grant
March 21, 2012

John V. Foley, Chairman
and Members of the Board of Directors
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Re: Recommendation to Cap MWD Rate Increases at 3% for 2013 and 2014

Dear Mr. Foley and Members of the Board,

We were disappointed that the majority of the MWD board of directors did not feel that it would be productive to meet together as a board to discuss approaches to lowering MWD’s proposed rate increases for 2013 and 2014, in advance of our board vote in April. As a result, we are submitting this letter to you and all members of the board for consideration prior to the April 10 board meeting.

RECOMMENDATION

We recommend that the board cap MWD “average” rate increases¹ at 3% for 2013 and 2014. We believe this can be accomplished – without any reduction of capital spending to maintain the Colorado River Aqueduct or any other MWD infrastructure – by reducing MWD’s Operations and Maintenance (O&M) expenditures by 10% and suspending conservation funding for the next two years. These changes would reduce the proposed two-year budget by $116.5 million and allow the “average” rate increases to be capped at 3% or less in 2013 and 2014.²

Our recommendation would also direct staff to return to the board with specific budget reductions to accomplish the minimum 10% reduction in O&M (or, $76.5 million in expenditures over the two years – without changing the scheduled OPEB funding).

¹ No one pays an “average” water rate at MWD – for example, MWD’s proposed Tier 1 Treated water rate increase for 2013 is 9.3%, and its Tier 1 Untreated water rate increase is 8.6%.
² Staff indicated previously that in order to reduce the rate increase from 7.5% for 2013 and 5% for 2014, to 5% for both years, it would need to cut expenditures by $26.4 million over the two year period. Based on this formula, we assume that cutting expenditures by $116.5 million (more than 4 times $26.4 million) would allow the rate increases for both years to be held to 3% or less. If this assumption is incorrect, then we ask that MWD staff provide the board with the amount of the budget reduction necessary to hold rates to 3% or less over the next two years.
BACKGROUND

In its budget and recommended “average” proposed water rate increases of 7.5% and 5% for 2013 and 2014, respectively, MWD staff proposed to increase the O&M budget by $15 million in 2013 and $22.5 million in 2014, including higher travel expenses, staffing levels and consulting services. This budget proposal increases MWD’s O&M budget by $52.5 million over the two years, and includes staffing increases of at least 42 or as many as 80 new employees.\(^3\)

In response to board member requests to lower the first year “average” rate increase to 5%, staff recommended a mix of reduced expenditures ($14 million and $13 million, respectively for 2013 and 2014), reducing Central Valley storage funding and $5 million per year reduction of conservation funding or other cuts of similar magnitude.

Staff’s recommended budget is inconsistent with MWD water sales and revenue trends, discussed below. It is also out of step with cities and other public water suppliers throughout Southern California that have been forced to make the difficult decisions to reduce expenditures as a result of declining revenues. Rate increases to support expanded budgets, including more staff and increased spending, ignore the economic realities our water ratepayers are facing. Budget reductions should target reduced spending rather than water supply programs such as the Central Valley storage funding.

DISCUSSION AND OTHER CONSIDERATIONS

Protection of Colorado River Aqueduct and Other Infrastructure – We agree it is important to maintain MWD infrastructure investments, including the Colorado River Aqueduct. That’s why our proposal would leave intact all capital spending as proposed by staff. But as we all know, repair and replacement of aging infrastructure is not the “No. 1 driver” of MWD’s proposed water rate increases.

Stop Punishing Water Conservation by Southern California Ratepayers – Water ratepayers across the Southland have responded to our call to reduce water usage over the past few years. Now, water ratepayers do not understand — and they are angry — that they are being asked to pay more for using less water.\(^4\) In fact, reduced demand for MWD water is the principal reason MWD’s rates have risen 75% since 2006, and the principal reason why MWD’s expenditures have

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\(^3\) MWD’s January budget document states that it includes a total authorized personnel complement of 1,907 (including 24 temp equivalents) for 2012/13 and 2013/14, with an assumed vacancy rate of 2.7% and 2.9%, respectively. This translates to 1,832 and 1,828 FTE for each of the two years, respectively. But staff reported to the board in February that it had 1,756 employees on its payroll — which would mean that MWD intends to hire 80 additional staff. A subsequent report by staff at the February board meeting said that applying the vacancy rate would result in 1,798 full time equivalents (exclusive of temps), which would mean that MWD intends to hire 42 additional staff.

exceeded revenues in three of the last four fiscal years. However difficult it is to explain to water ratepayers, we all know that fixed costs are not reduced with reduced sales — and, that it is essential that fixed costs be paid. But MWD’s proposed rate increases go far beyond covering fixed costs — the budget actually *increases* spending on projects that are *not necessary* at this time of reduced demand for MWD water.

This is why we recommend that conservation funding for the next two years be suspended. While we understand the popularity of these programs, these expenditures are simply not necessary to “incentivize” water conservation at a time when water sales are already down more than 30% at MWD and most retail water suppliers. Retail ratepayers are already being asked to fund the difference between fixed costs and the amount of revenue available from reduced sales. It isn’t fair — or even logical — to also ask our ratepayers to pay for even more water conservation right now — they need and deserve to take the “break” that suspension of these payments would provide in the form of lower water rates.

**Renewed Call for Moratorium on Use of MWD Ratepayer Dollars to Pay for Member Agency Water Projects** — MWD has also been relying on its outdated Integrated Resources Plan and unrealistic water sales projections to support its continued payment of MWD water ratepayer dollars to subsidize member agency water supply projects. These projects are not owned or operated by MWD, and MWD has no right to the water supply. MWD has failed to demonstrate that these payments benefit the customers of any member agency other than the agency receiving the payments. The bald statement that these projects “will strengthen regional...
water supply reliability,” absent a substantial factual basis and analysis connecting the facts to the conclusion, is insufficient to support MWD spending under Proposition 26 or other legal requirements.

Stop Underwriting Peaking Costs of Los Angeles and Other Agencies – The Water Authority has calculated that the annual benefit to the City of Los Angeles Department of Water and Power under the current MWD rate structure – resulting from MWD’s failure to identify and allocate the costs of annual peaking – is $35 million to $40 million per year. The Water Authority is not the only agency underwriting these costs – ratepayers from Orange County, Ventura County, Riverside County and San Bernardino County are also paying for LA’s annual peaking. This is because the current rate structure fails to account for the costs associated with annual peaking, including the cost of water, distribution and storage capacity necessary to serve these sporadic annual demands.11

Many agencies, including the Water Authority, have some annual and seasonal peaking that is not accounted for in MWD’s cost of service. These costs should be identified and charged to the agencies that are benefitting from the investments necessary to meet their water supply needs. We raised this issue in our February 3, 2012 letter to Business and Finance Committee Chairman Grunfeld, copied to MWD’s General Manager and Chief Financial Officer (copy attached). Nearly one month later, on March 6, 2012 – after the budget workshops had already been concluded – we received a response from the CFO that did not address the substance of this issue, but stated that, the issue “is worded as a statement or position and should be addressed through the Board or Committee process” (copy attached). On March 8, we responded to the CFO’s letter, again presenting this issue in the form of a question. We asked,

Does the MWD cost of service currently capture and charge to the agencies that benefit, the full costs of system “standby” capacity and supply that enables year-to-year (annual) peaking off MWD?

We still have not received a response from the CFO, from MWD management or from the Chairman of the Board or Chairman of the Business and Finance Committee. Properly assigning these costs would result in additional water rate reductions for many ratepayers throughout MWD’s service area. We ask that you support our request at the April board meeting that this issue be addressed through the board or committee process, as suggested by the CFO – and, that adoption of rates be deferred until the board receives a full explanation why these costs are not accounted for or properly assigned in MWD’s cost of service. By copy of this letter, we are also disproportionately on the agencies – and their customers – that have not been rewarded with rich subsidy contracts.

11 Staff’s February 17, 2012 presentation to the Member Agency Managers on the Proposed Biennial Budget, Revenue Requirements, and Water Rates and Charges Fiscal Years 2012/13 and 2013/14, slide 7, is incorrect. While it correctly states that additional physical capacity must be designed into the system and additional capital costs are incurred, and that these costs include portions of distribution and regulatory storage, it is incorrect in its statement that MWD’s capacity charge “recovers the costs of the system used to meet peak demands.” This is not accurate even as to seasonal peaking, let alone annual peaking, which is not accounted for in MWD’s cost of service allocations.
Mr. Foley and Members of the Board  
March 21, 2012  
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asking the General Counsel to advise us, in writing, whether she agrees with the CFO that the MWD board has the option, as a “policy” matter, to not charge the cost of the services, facilities and supplies attributable to annual peaking to the agencies that benefit.

SUMMARY

We urge the board to adopt a budget that caps the “average” rate increases at 3% for 2013 and 2014. Further, we recommend that the adoption of water rates and charges be deferred until MWD management has provided a cost of service analysis that properly accounts for and assigns all MWD costs – including the cost of annual peaking – to the agencies that benefit.

Sincerely,

Lynne Heidel  
Keith Lewinger  
Fern Steiner  
Doug Wilson  
Director  
Director  
Director  
Director

Attachments:

1. Water Authority’s letter to MWD re biennial budget dated February 3, 2012
2. MWD response to Water Authority’s comment letter dated March 6, 2012
3. Water Authority’s response to MWD letter dated March 8, 2012

cc: Jeff Kightlinger, MWD General Manager  
Gary Breaux, MWD Chief Financial Officer  
Marcia Scully, MWD General Counsel  
San Diego County Water Authority Board of Directors
March 12, 2012

John V. Foley, Chairman
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Re: Oppose Local Resources Program Agreements – Board items:
7-4 – LADWP Chevy Chase Park and Los Feliz Golf Course
8-6 – LADWP Harbor Industrial Project
8-7 – LADWP Hansen Dam Golf Course
8-8 – LADWP Griffith Park
8-9 – Eastern MWD Landscape Irrigation
8-10 – West Basin MWD Seawater Barrier and Landscape Irrigation

Mr. Foley and Members of the Board,

We have reviewed the staff reports recommending board approval of six funding agreements under the Local Resource Programs (Board items 7-4, 8-6, 8-7, 8-8, 8-9, and 8-10). We oppose the use of MWD regional water ratepayer dollars to pay for these local supply projects of these member agencies, on the following grounds.

1) Preparation of the underlying data and cost of service and rate structure proposal purporting to justify these payments is the product of a broken governmental process, all as described in detail in the submittals the Water Authority has presented at the public hearing on MWD’s proposed water rates and charges for 2013 and 2014. As presented at the public hearing earlier this morning, the agencies that are the principal beneficiaries of these programs are draining millions of dollars from the pockets of water ratepayers in other cities and regions in favor of their own.

2) There is no credible basis established by the board memoranda or otherwise to support these payments. The mere statement that, "the project(s) would strengthen regional water supply reliability" is wholly insufficient to support the use of regional ratepayer dollars to pay for these agencies’ local water supply programs. Nor are these payments supported by any demonstration in the board memoranda or otherwise that these payments benefit anyone but the individual agencies to which payments are being made. There is no demonstration that any water supply or transportation costs are avoided by MWD as a result of these payments.

3) To the contrary, these payments harm all MWD water ratepayers by further reducing demand for MWD water and the revenues MWD depends upon for its very existence, and thus driving up the cost of MWD water supply for all other water ratepayers. MWD’s expenditures have
Chairman Foley and members of the Board
March 12, 2012
Page 2

exceeded its revenues in three out of the past four years.\(^1\) MWD's lower sales are driving up the cost of water. Customers are angry because they are being asked to pay more at the same time they are using less. Rather than respond to these circumstances, MWD is further exacerbating the situation by paying some of its member agencies to buy even less water. MWD’s continued reliance on an outdated Integrated Resources Plan that includes bloated water demands that clearly do not exist – and are not reasonably projected to exist any time in the near future, if ever – is an insufficient basis to justify these payments.

4) As of August 2010, the MWD board took action stating that the Water Authority is no longer eligible to receive funds collected through its Water Stewardship Rate. As a result, and because no other direct or indirect benefit to the Water Authority and its customers is demonstrated, the rates and charges violate California law and may not be collected from the Water Authority’s customers.

5) Staff’s recommendation to the board to approve these projects is inconsistent with its own action in the public member agency process to suspend further discussions with the Local Resource Development Strategy Task Force, in order to reexamine the merits of this program and the water demand projections upon which it is based. Until that examination is completed, consideration of all local resource projects should be suspended.

6) The board memoranda proposing funding for these projects are insufficient to inform the board of directors of the costs associated with these projects. For example, Board Letter 8-9 (Eastern Municipal Water District) states that MWD’s share of the cost will be $2.3 million, but that it could go up to $31.3 million – almost 14 times higher. Similarly, Board Letter 8-10 (West Basin) states that the financial impact to MWD is $7 million, but that it could go up to $50 million – more than 7 times higher. The board has no way of knowing based on the Board Letters what the benefits and risks are, or what MWD’s financial exposure in connection with these projects will be.

The Water Authority would have no objection if the other MWD member agencies and the cities and customers they serve wish to subsidize the local water supply projects of the City of Los Angeles and other large agencies benefitting from this program. However, if they wish to do so, a separate fund that they pay into should be created for that purpose.

Sincerely,

Lyne Heidel  Keith Lewinger  Fern Steiner  Doug Wilson
Director  Director  Director  Director

cc: Jeff Kightlinger, MWD General Manager

\(^1\) See February 14, 2012 Board Letter 8-2, page 60, note 5.
February 13, 2012

Board of Directors
Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, CA 90012

Re: Board Memo 8-2: Authorize the execution and distribution of Remarketing Statement in connection with the remarketing of the Water Revenue Refunding Bonds (Index Mode), 2011 Series A-1 and A-3, in the amount of $128,875,000

Dear Chairman Foley and Board Members,

We have reviewed Board Memo 8-2 including Attachments. For reasons we have described in detail in prior correspondence concerning the sale of bonds by Metropolitan – as well as in recent correspondence regarding the proposed budget (Attachment 1) – we are not comfortable that the Remarketing Statement as drafted by Metropolitan allows us to meet our legal responsibilities in voting to approve the draft Remarketing Statement. We must therefore respectfully vote against the staff recommendation.

We understand the need for the remarketing. And, we acknowledge the edits Metropolitan made in response to our comments on the last draft Appendix A (Attachment 2). However, we do not believe the edits went far enough to ensure that information essential to making an informed investment decision is being presented in a manner that is not misleading. The draft Remarketing Statement does not correct these deficiencies. In summary, the principle (but not exclusive) areas of concern remain the following:

- Failure to sufficiently describe the changed circumstances that have resulted in reduced demand for Metropolitan water.
- Failure to adequately describe the impact on water sales of conservation requirements and higher water rates.
- Risk associated with Metropolitan’s inability to secure long term purchase contracts or legal equivalent from its member agencies.
- Risk to Metropolitan of its heavy reliance on water sales revenues to pay its fixed costs.
- Failure to adequately describe the risks and costs associated with uncertainly and volatility of water purchases by City of Los Angeles.
- Risk associated with projecting water sales based on “average” pricing.
- Failure to reasonably estimate future water rate increases, generally, and as associated with Metropolitan’s Integrated Resources Plan as adopted by the Board.
Chairman Foley and Members of the Board
February 13, 2012
Page 2

- Impact of Proposition 26 on setting water rates and charges.
- Failure to describe impacts resulting from the fact that Metropolitan expenditures have exceeded revenues in three out of the last four years.
- Undue reliance on historical data to predict future outcomes in the current, changed water supply and fiscal environment.

While we are aware and have taken into account that the draft Remarketing Statement includes a number of “disclaimers” in these and other areas, we are concerned that certain of these disclaimers could be challenged because they relate to matters that could or should have reasonably been known by Metropolitan and its Board of Directors.

We do not come to this decision lightly. If Metropolitan and the Board wish to work with us to address our concerns, we will provide detailed comments on the draft Remarketing Statement. We note that we have raised these concerns repeatedly in the context of many different board actions, without receiving a substantive response.

Sincerely,

Lynne Heidel
Director

Keith Lewinger
Director

Fern Steiner
Director

Doug Wilson
Director

cc: Jeffrey Kightlinger, General Manager
    Gary Breaux, Chief Financial Officer
    San Diego County Water Authority Board of Directors

Attachments:
1. February 3, 2012 letter re: MWD Budget and Rates
2. August 22, 2011 letter re: Appendix A
February 3, 2012

Aaron Grunfeld
Business and Finance Committee Chairman
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Re: Proposed Biennial Budget and Associated Rates and Charges for 2012/13 and 2013/14

Dear Mr. Grunfeld:

First, we want to thank you for your commitment to hold budget workshops so the board may review, ask questions and understand the proposed budget.

We have reviewed staff’s proposed biennial budget and associated rates and charges for 2012/13 and 2013/14, as well as the slides presented at the January workshop. Based on this preliminary review, we are providing you with the comments, requests and questions which are attached. In order to facilitate the board’s deliberation of these issues, we request that staff respond to our comments and questions in writing prior to the next budget workshop.

We look forward to continuing this important dialogue at the next budget workshop.

Sincerely,

Lynne Heidel
Director

Keith Lewinger
Director

Fern Steiner
Director

Doug Wilson
Director

Attachment

cc: Jack Foley, MWD Board Chairman
    Jeff Kightlinger, MWD General Manager
    Gary Breaux, MWD Chief Financial Officer
All references are to Budget Memo 8-1 for the January 10, 2012 Board meeting or to the power point presentation at the January 24, 2012 budget and rate workshop.

1. **The Board must take steps to “right-size” MWD in order to ensure that revenues – based on more reasonable demand projections – are sufficient to pay MWD’s costs.**

   - MWD’s water deliveries declined almost 500,000 acre feet over the last four years from 2.26 million acre feet (MAF) in 2008 to 1.68 MAF in 2012. Moreover, the 2012 delivery figures included 164,000 acre feet of San Diego County Water Authority’s (Water Authority) QSA transfer water and 225,000 of “one-time” discounted water sales that would not have occurred at full price. MWD’s 2010 Regional Urban Water Management Plan (RUWMP) shows its average year sales in 2030 will be 22% lower than projected in MWD’s prior RUWMP just five years ago. MWD’s sales projections are flat or trending downward and yet, the Board has taken no meaningful actions, in terms of programs or staffing, to reduce the expense side of the budget to reflect this dramatic reduction in MWD sales.

   - What is basis of budget demand projections assuming full service sales of 1.5 MAF next year and in future years? The Board memo states that the sales estimate is “conservative,” yet, this assumption is 200,000 acre feet more than this and last year’s full service sales of 1.3 MAF.

   - MWD has not covered its operating costs in six out of the last eight years (2004-2011). The first order of business must be to reduce spending, consistent with budget cuts already implemented by most of the cities and retail agencies in Southern California.

   - Given that retail demand is down 20% or more across the MWD service area, we recommend a moratorium on all subsidy programs designed to further reduce MWD sales (and revenues). The moratorium should remain in place until MWD updates its IRP projections and conducts a comprehensive study to evaluate the need for MWD to pay for such programs. This recommendation should not be interpreted to suggest that the Water Authority does not fully support the development of local supply projects including increased water use efficiency, but rather, that funding should be at the local level.

   - The budget notes that replenishment water will be sold at full service rates, however, it does not appear to account for the cost of “incentives” or “rebates” that are also part of the staff recommendation for a revised replenishment program. Please identify the amount and cost of service category to which these incentives or rebates are assigned. What rate is proposed to generate the revenue to pay the cost of these incentives or rebates?

2. **MWD should reasonably spread cost burdens among current and future rate payers; it should not raid revenues intended for capital projects to pay operating expenses, and should not overburden future rate payers by deferring OPEB funding.**

   - The budget includes a reduction of PAYGo revenue collections in 2012/13 that is inconsistent with the Board’s adopted policy. If the Board approves this recommendation, MWD will have failed to follow its own PAYGo funding policy in eight out of the last ten years (2005-2014). Funding capital projects at such low PAYGo levels unfairly shifts obligations from current
ratepayers to future ratepayers. Moreover, several years of midyear reallocation of PAYGo funds intended for capital to meet operating expenses has distorted cost of service. The Board should not continue to apply revenues that are collected for capital projects to pay operating costs.

- The proposed budget continues to shift a disproportionate share of unfunded OPEB liability to future ratepayers. The funding schedule presented at the January workshop to begin ramping up payments to match MWD’s Annual Required Contribution (ARC) does not go far enough. MWD should cut costs now in order to increase funding to match its ARC.

- A greater share of MWD’s Capital Improvement Program (CIP) now consists of R&R projects. Indeed, the January workshop presentation showed R&R expenditures represent about two-thirds of CIP costs over the two years reviewed. Aside from the misuse of PAYGo to pay operating expenses, we would also suggest that the Board consider changing its PAYGo funding strategy so it is proportionate to the total CIP over time. This would ensure that current ratepayers are not being asked to pay a disproportionate share of R&R.

3. **MWD must properly account for the cost of storing water.**

Based on data assembled from the proposed budget, the supply and delivery balance is as followed:

<table>
<thead>
<tr>
<th>Supply/Demand</th>
<th>2012/13</th>
<th>2013/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Water Project (Exchange)*</td>
<td>1,260 TAF</td>
<td>1,140 TAF</td>
</tr>
<tr>
<td>Net to MWD</td>
<td>1,140 TAF</td>
<td>1,032 TAF</td>
</tr>
<tr>
<td>Colorado River**</td>
<td>727 TAF</td>
<td>890 TAF</td>
</tr>
<tr>
<td><strong>Total supply to MWD service area</strong></td>
<td>1,867 TAF</td>
<td>1,922 TAF</td>
</tr>
<tr>
<td><strong>Total MWD demand</strong></td>
<td>1,700 TAF</td>
<td>1,700 TAF</td>
</tr>
<tr>
<td><strong>Excess supply</strong></td>
<td>167 TAF</td>
<td>222 TAF</td>
</tr>
</tbody>
</table>

*The budget document does not describe the exchange; if this is not MWD’s exchange obligation with Coachella and Desert Water, please provide details.

**The budget document includes Water Authority’s QSA water at 172.7 TAF and 177.7 TAF for 2012/13 and 2013/14, respectively, as both supply and demand. MWD does not report the local water supplies and associated demand of its other member agencies, and has no basis for treating Water Authority’s QSA water differently. In accordance with the terms of the Exchange Agreement, the revenues generated from payments made under the Exchange Agreement should be treated as transportation or wheeling revenues.

- Staff reported at the workshop that it plans to store 300,000 acre feet of water this year, which is more water than is estimated to be available for storage in the supply and delivery balance. What is the source of the water staff is planning to store, and, how are the costs of that water captured in the cost of service? How much funding is included in the budget to pay for storage costs? Finally, is the energy cost of moving the water into storage being captured in the System Power Rate or through Supply Programs?
4. **The cost of service does not recover the costs of system “standby” capacity and supply that enables year-to-year peaking off MWD.**

   - Many agencies peak off the MWD system from year-to-year, depending on hydrology and the availability of local water supplies. MWD has developed and continues to develop water supplies and incur storage and facility costs in order to meet these demands, but is not fully allocating the costs associated with these investments from the agencies that benefit from them. MWD must change its rate structure in order to account for and allocate these costs so that they are borne by the agencies that benefit by being able to peak and then roll off the MWD system.

5. **The Delta Supply Surcharge should be continued because the purpose for which it was established by the Board has not changed.**

   - Please provide the basis of the staff recommendation to delete the Delta Surcharge. Given the rationale stated in Board Memo Revised 8-3 dated April 14, 2009, the Delta Surcharge should remain in place. In fact, the budget states at page three that increased funding is being included to aggressively pursue exactly the type of projects the Delta Surcharge was intended to cover.

   - Was the Delta Supply Surcharge combined with the Tier 1 supply rate? If not, how were these costs reassigned?

6. **Staff needs to provide more information why individual rate components are increasing or decreasing; and, take steps to better smooth rate increases at the retail level.**

   - The proposed individual rates and charges include changes that vary significantly from the “average” 7.5% increase staff reports. Since no agency pays “average” rates, information needs to be provided on why individual rates and charges are increasing or decreasing. Please provide the data supporting the System Access Rate increases. Also, please provide the data supporting the supply rate decrease.

   - Staff should also explain why some elements show decreases one year and increases the next year – or vice versa, and, present alternatives to avoid swings in the rates and charges.

7. **Staff must track all rate component costs and expenditures, not just the Water Stewardship Fund.**

   - MWD tracks over- and under- expenditures for revenues collected under Water Stewardship rate, but not others. What is the basis for this disparate treatment? For example, although MWD has a Treatment Surcharge Rate Stabilization Fund, when fund revenues are insufficient to pay those costs, MWD uses General Fund revenues to cover the difference. The net effect is that raw water customers are subsidizing treated water customers. We request that MWD provide a cost of service analysis for all rate components and identify or develop internal tracking mechanisms to prevent cross-subsidies.
8. **All operations and staffing should be “right-sized” to reflect reduced demands.**

- What were staffing levels and budget in 2008? What are they today?
- What criteria has staff used to “optimize” staffing levels?
- Are the staffing levels recommended in the budget higher than current actual levels? If so, why?
- Please provide a list of the O&M association dues that total $5 million annually.

9. **A contingency plan should be included in the proposed budget.**

- The biennial budget should include a contingency plan that would automatically be triggered mid-year to reduce current costs in the event projected revenues are lower than budgeted.
- Similarly, the budget should provide a plan that describes in detail how MWD will apply excess funding in the event projected revenues exceed expenditures. This is especially important in light of the recent draw-down of reserves, raids on the PAYGo fund and cross-subsidies that have been created by the failure to track individual rate components – or to budget so that projected revenues are reasonably expected to be sufficient to pay MWD’s expenses.

10. **Even if it is unwilling to update or modify its cost of service analysis generally – which it should – MWD must at a minimum provide a new cost of service analysis to ensure compliance with Proposition 26.**

- Even If the Board does not require staff to update or modify its cost of service analysis, or, support a moratorium on local projects spending to mitigate the impacts of reduced demands and MWD revenues, staff must identify the benefits it claims are associated with these payments and demonstrate that those benefits are received by those paying the charges and that the amount of the charge is reasonably related to the benefits. The benefits that have been stated but which have not been supported by any data or analysis include (1) capacity will be made available that is otherwise not available for the transportation of MWD water; (2) investments MWD would otherwise need to make in other facilities and/or water supply will be avoided as a result of these payments; and (3) MWD needs and will benefit from the local water supply it is paying for. Please provide the analysis required by Proposition 26.
December 13, 2011

John V. Foley
Chairman of the Board
Metropolitan Water District of Southern California
P. O. Box 54153
Los Angeles, CA 90054-0153

Re: SB 60 Annual Public Hearing and Report to the Legislature Regarding Adequacy of MWD’s Urban Water Management Plan REQUEST TO INCLUDE INFORMATION IN REPORT TO LEGISLATURE

Dear Chairman Foley and Members of the Board of Directors:

We request that this letter and all of its attachments be made a part of today’s board record and included in MWD’s Annual Report to the Legislature regarding the adequacy of MWD’s Urban Water Management Plan to achieve increased emphasis on cost-effective conservation, recycled water and groundwater recharge as described in the MWD Act.

As background to yesterday’s public hearing on this subject, the Water Authority prepared and submitted to MWD a short PowerPoint presentation that was not allowed by Mr. Kightlinger to be shown to the board of directors. MWD staff also refused to distribute hard copies of the presentation to the board in accordance with the usual practice as stated on the speaker’s request form; because of these refusals, San Diego Director Lewinger distributed the copies. We were not aware at the time of the hearing that the Water Authority’s PowerPoint had already been loaded on the MWD computer, or we would have objected at that time. Water Authority staff was also informed yesterday that no presentations may be made to the MWD board unless they are first reviewed and approved by MWD management. We do not believe that MWD may place any such prior restraint on the content of material proposed to be presented at any public meeting of the MWD board of directors. As Chair, you undoubtedly know that the Brown Act expressly states that “a local agency shall not prohibit public criticism of the policies, procedures, programs, or services of the agency, or the acts or omissions of the legislative body.” (Government Code § 54954.3 (c).)

Copies of the Water Authority’s PowerPoint presentation, written testimony by Assistant General Manager Dennis Cushman and a report by Gordon Hess and Associates titled, Comparison of MWD Demand Projections, Member Agency UWMPs and Local Water Supply Development Plans (Hess Report), are attached. As you know, for the reasons described in Mr. Cushman’s testimony and attachments, we believe that MWD focused on the wrong question at yesterday’s public hearing and in its draft Report to the Legislature by limiting it to a report on MWD subsidy programs.

A public agency providing a safe and reliable water supply to the San Diego region
We also request that MWD inform the Legislature about its “Rate Structure Integrity” (RSI) “policy” and clause, which may be used by MWD to terminate all MWD funding agreements for conservation, recycled water and groundwater recharge in the event that agency challenges MWD’s water rates in court or before the Legislature. Further, MWD should include in its SB 60 report that the MWD board has, in fact, terminated, with limited exception, all of the Water Authority’s funding agreements that contain the RSI provision, and refused to enter into future funding agreements supporting conservation, recycled water and groundwater recharge in San Diego County. (A copy of MWD’s June 23, 2011 to the Water Authority is attached.) MWD has essentially blackballed the Water Authority from participation in these programs, in spite of the fact that it continues to collect more than $16 million annually from San Diego County water ratepayers to pay for these programs. MWD should also inform the Legislature that the Water Authority is challenging MWD’s actions and the constitutionality and legal propriety of the RSI clause in the lawsuit now pending in Superior Court in San Francisco.

For the reasons described in Mr. Cushman’s testimony and in the Hess Report, we do not believe that MWD has done the analyses necessary – either in its 2010 Integrated Resources Plan (IRP) or 2010 Regional Urban Water Management Plan (RUWMP) to support and enhance water conservation, recycled water and groundwater recharge in Southern California. Indeed, the greatest impediment may be the very perpetuation of the notion that these projects will only be developed if MWD subsidizes them. Conservation is at an all-time high throughout the Southland as a result of the higher water rates being charged by MWD and its member agencies. More local water supply projects are being developed because they have become cost-competitive due to the higher water rates being charged by MWD. It is clearly time for a fresh and realistic look at MWD’s demand and rate projections and to tie future resource planning directly to the willingness and firm financial commitment of its member agencies to pay.

Sincerely,

Lynne Heidel  
Director

Keith Lewinger  
Director

Fern Steiner  
Director

Doug Wilson  
Director

cc:  MWD Board of Directors  
Jeff Kightlinger, General Manager  
San Diego County Water Authority Board of Directors

Attachments:
1. Water Authority’s PowerPoint Presentation to MWD WP&R dated December 12, 2011
2. Water Authority Assistant General Manager Dennis Cushman’s testimony
4. MWD June 23, 2011 letter to Water Authority
November 4, 2011

John V. Foley
Chairman of the Board
Metropolitan Water District of Southern California
P. O. Box 54153
Los Angeles, CA 90054-0153

Re: Board Memo 8-8 –
Approve Policy Principles for a Replenishment (Discounted Water) Program

Dear Chairman Foley,

Board Memo 8-8 asks the board to approve policy principles to guide the development of a new program for the sale of discounted water. We do not believe that the policy principles as proposed by staff provide a sufficient and clear basis to guide the development of a new program. Indeed, we do not believe that the staff has established the need for a new program to sell discounted water, whether it is described as “replenishment,” “regional water management,” or otherwise.

We have raised a number of questions over the past several months, since the General Manager first proposed the sale of discounted water last April. Our concerns have focused on the unprecedented budgetary and fiscal challenges confronting Metropolitan, including the fact that its expenditures have exceeded revenues in six out of the last nine years. Over the last four years, Metropolitan has resorted to raiding funds intended for pay-as-you-go capital expenditures in order to meet normal operational expenses. The discounted water program is a concern because when Metropolitan sells water at a discount, it displaces full-rate water sales, which in turn leads to lower revenues overall and insufficient recovery of fixed costs.

While the staff continues to bring back recommendations based on the wishes of the member agencies, it has failed again to address the needs of Metropolitan. We understand why the member agencies would like Metropolitan to sell them water at a discount, what we do not understand is how the Metropolitan staff proposes to ensure benefit to all member agencies when discounted water is sold to some, or, how Metropolitan will be in a position to reverse its declining financial condition through the sale of discounted water.

The analysis provided in Board Memo 8-8 fails to address the very concerns raised by staff in its April 26, 2011 Board Memo (5-1) that first recommended reinstituting the sale of discounted water. Those concerns included – and remain:
• Questionable and unquantifiable performance criteria for a discounted water program;
• Loss of full service sales due to availability of discounted water;
• Unequal distribution of costs and benefits among member agencies; and
• Cash flow and budget issues associated with availability of discounted water.

The staff has also failed to respond to questions about Metropolitan’s existing storage programs or the assumptions it is making about the use of that storage in the future. As a result, there is no basis for determining either the need for, or benefit of another new program.

We are attaching our past communications to the board on this subject. We request that staff respond, in writing, to the questions asked in our letters. Doing so would provide the board with a sound foundation to discuss the real policy principles involved in the proposed sale of discounted water. We would appreciate a written response to our letters in any event because they raise issues and concerns of great interest to our member agencies and water ratepayers.

Sincerely,

Lynne Heidel  Keith Lewinger  Fern Steiner
Director  Director  Director

cc: MWD Board of Directors
   Jeff Kightlinger, General Manager
   San Diego County Water Authority Board of Directors

Attachments:
1. April 25, 2011 letter to Jack Foley re: Board Memo 5-1 – Sale of Discounted Water and
   Attachment 1: Issues Associated with the Sale of Discounted Water by MWD
2. May 6, 2011 letter to Jeff Kightlinger re: Board Memo 5-1 – Sale of Discounted Water
3. September 12, 2011 Comments and Questions on Board Memo 9-2 – Update on
   Replenishment Service Program, Director Keith Lewinger
4. October 7, 2011 letter to Jack Foley re: Water Planning and Stewardship Committee
   Items 6a, 6b, and 6d
October 25, 2011

Jack Foley, Chairman
Metropolitan Water District of Southern California
PO Box 54153
Los Angeles, CA 90054-0153

Re: KPMG Audit Report of MWD’s Basic Statements for Years ended June 30, 2011 and 2010

Dear Chairman Foley:

The Auditor’s report states that it is prepared in accordance with Government Auditing Standards. Though these standards do not require the presentation of budgetary information for Enterprise funds, it would be extremely helpful for this information to be presented as supplemental information in the Comprehensive Annual Financial Report (CAFR) following the notes to the financial statements, so it could provide a context for evaluating evidence and understanding of findings, conclusions and recommendations in the report.

Referring to page 13, the information on future debt service is misleading as it does not include projected future debt issuance. It should be noted that it does not include projected future debt issuance.

In the CAFR transmittal letter it would be prudent to disclose the potential impacts of Proposition 26 on revenue policies, in particular, that the collection of revenues under the current policy for conservation and Local Resource Programs may not meet Proposition 26 or other legal requirements.

Referring to page 58, Bay Delta discussion mentions it is expected that the BDCP will be approved, and a permit decision will be made in 2012, but the report should disclose the potential cost impacts to MWD of the BDCP plan.

Referring to page 60, SDCWA litigation disclosure mentions that the Exchange Agreement requires MWD pays the disputed portion paid by SDCWA if the Water Authority prevails, but it should also disclose that in accordance with the Exchange Agreement MWD is required to escrow the disputed funds each year until the litigation is completed.

Referring to page 69, the discussion should disclose that there is an escrow account for the SDCWA litigation, identify where it is held and that as well as any implications for reserve fund Board policy minimums.

A public agency providing a safe and reliable water supply to the San Diego region
We request that management respond in writing to the issues identified in this letter.

Sincerely,

Jim Bowersox  
Director

Lynne Heidel  
Director

Keith Lewinger  
Director

Fern Steiner  
Director

cc: MWD Board of Directors
October 7, 2011

John V. Foley, Chairman
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Re: Water Planning and Stewardship Committee items 6a, 6b, and 6d

Dear Chairman Foley,

We have reviewed the staff reports to be discussed under Committee items 6a, 6b and 6d at the October 11, 2011 Water Planning and Stewardship Committee. The reports provide a long list of activities described as implementation of the 2010 Integrated Resources Plan (IRP) including BDCP and other imported water projects, recycled water projects, conservation, seawater desalination and, the sale of discounted water. What is absent from the reports is any analysis showing:

- The demand for all of the water that will be produced by these projects;
- The rate increases associated with implementation of all of these projects;
- The regional benefit (to all member agencies paying the rates) of payments by Metropolitan for some member agency local water supply projects;
- The regional benefit (to all member agencies paying the rates) of the sale of discounted water by Metropolitan at a time when its water sales are more than 25 percent lower than projected and water rates are far higher than projected in Metropolitan’s adopted Long Range Finance Plan; or
- How all of these projects are expected to be paid for.

Almost twenty years ago, the Metropolitan Blue Ribbon Committee Task Force urged Metropolitan to fully integrate its resource planning and rate structure efforts because, “reliability, cost and demand are all interdependent and should be treated that way in the IRP and rate structure reform processes” (page 9). Unfortunately, Metropolitan has steadfastly refused to do so – as reflected in this month’s board reports of ongoing project implementation without any discussion whatsoever about cost or demand. Metropolitan’s stubborn refusal to reduce its spending and operations is inconsistent with the economic reality today facing every city and water retailer in Southern California.

The IRP states that it is based on “adaptive management.” It is time now for Metropolitan to “adapt” to actual, changed circumstances including dramatically reduced sales, dramatically
reduced projected demand for Metropolitan water, and, rapidly escalating water rates that will further dampen demand for Metropolitan water.

Since 2003, Metropolitan’s expenditures have exceeded its revenues for six out of nine years, and for the same number of years, it has diverted funds intended for pay-as-you-go capital projects to pay for operational expenses. Metropolitan’s financial reserves are being depleted, and now stand at their lowest level in 20 years. Metropolitan must stop analyzing project implementation in a vacuum and on a piecemeal basis.

The rate increases associated with declining sales and new projects are inevitable. The impacts of these rate increases are already being felt throughout Southern California. We strongly urge Metropolitan to cease entering into any new project funding agreements and cease the sale of discounted water until Metropolitan staff and board update IRP demand projections to reflect current realities.

Metropolitan needs a rate structure and long-term financial plan that are fully integrated with realistic demand projections. Metropolitan must conduct a cost/benefit and cost of service analysis to justify both the investment of regional ratepayer dollars in member agency water supply projects and the sale of water at a discount. Not only is this required by law, but it is sound fiscal planning that is essential at a time when Metropolitan’s revenues are clearly insufficient to pay for its current costs and programs.

Sincerely,

Jim Bowersox
Director

Lynne Heidel
Director

Keith Lewinger
Director

Fern Steiner
Director

Cc: MWD Board of Directors

Jeff Kightlinger
August 22, 2011

Board of Directors
Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, CA 90012

Dear Chairman Foley and Members of the Board:

We have reviewed Appendix A of MWD’s Draft Official Statement, distributed to the members of the board on August 15 relating to the upcoming refunding of certain fixed revenue bonds (Draft or Appendix A). While we support MWD’s desire to take advantage of the market to reduce its debt obligation, we remain concerned that MWD’s financial condition is not accurately described in Appendix A. As you know, the Water Authority’s MWD representatives have sent three prior letters regarding Appendix A dated September 22 and December 9, 2010 and May 16, 2011, copies of which are attached as Attachments 1-3, respectively, and incorporated herein by reference. Although MWD made specified changes as described in response letters dated September 23 and December 13, 2010 and email dated May 24, 2011, respectively, we do not believe that MWD has adequately addressed the stated concerns or that the August 15, 2011 Appendix A fairly presents MWD’s financial position currently or prospectively. We request that the Draft be modified to address these concerns in order to provide adequate disclosure to potential investors.

The Water Authority has previously raised many of the questions and concerns noted in this letter in prior written communications with MWD. These past communications include but are not limited to letters regarding the budget, dated April 11, 2011; adoption of the Long Term Conservation Plan, dated August 15, 2011; and, Member Agency Willingness to Sign Take-or-Pay Contracts and Request to Correct the Record of July 12, 2011 MWD Board of Directors Meeting, dated August 16, 2011. A copy of each of these letters is attached again for consideration by you and the other members of the board, MWD’s management team, General Counsel, outside bond counsel, underwriter’s counsel and other members of the financing team (Attachments 4-6, respectively). Unfortunately, MWD has not responded to our letters directly or indirectly by addressing the issues on the merits in changed MWD board policy or management actions.

In addition to the concerns that are described in this past correspondence, which we request you address in your response to this letter, we have the following specific comments on the Draft.

Appendix A, as a whole, fails to adequately describe the financial impacts associated with reduced water sales. Although the Draft discloses that its member agencies are not required to purchase any water from MWD (page 27), the Draft fails to describe the associated risk to MWD, or, its inability to secure long term purchase contracts or other firm financing commitments that are not subject to change by the board of directors to meet its current and future fixed obligations.

Although the Draft includes a section titled, “Regional Water Resources” (beginning at page 27), the

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discussion does not make clear what MWD’s role is – or is not – in developing local water supplies. Many of the projects noted as “Regional Water Resources” will actually be developed at the local level without any involvement by MWD and, thus, further reduce MWD water sales in the future. The Draft should disclose that local water supplies have become much more cost-competitive as a result of the increasing cost of MWD’s imported water and that as a result, many MWD member agencies are now pursuing the development of local water supply alternatives.

In addition to the development of local water supplies described above, the escalating cost of MWD water will likely result in reduced sales in the future. The Blue Ribbon Committee Task Force noted this more than 15-years ago. However, MWD continues to present analyses that do not consider the cost of water as a feature that will dampen future water sales. See, for example, Management’s Discussion of Historical and Projected Revenues and Expenditures at page 71 (future sales forecasts will reflect “a return to more normal weather conditions, a recovering economy and population growth, notwithstanding impacts of conservation and projected increases in water rates” (emphasis added). The Draft appears to mistakenly rely on past history as an indicator of future MWD sales (page 27) rather than assessing the dramatically changed circumstances confronting MWD.

Although the state legislature has mandated 20% conservation by 2020, MWD’s IRP, recently adopted Long Term Conservation Plan and Appendix A do not describe any impact on MWD water sales. In fact, the Draft states that MWD water sales will return to historic levels at 2 million acre feet beginning in fiscal year 2013-14 “notwithstanding impacts of conservation” (page 71). The Draft should explain how sales are expected to continue at these levels at the same time the retail agencies in the MWD service area are achieving 20% conservation.

Although the Draft discloses the Water Authority’s purchase of conserved water from IID and the water it has developed from lining the All-American and Coachella Canals, the Draft describes MWD’s transportation of this water under the Exchange Agreement as an MWD water sale. This characterization is misleading and disguises the true fact that MWD water sales have been reduced by the amount of water the Water Authority has independently secured from these sources.

The discussion of the Water Supply Allocation Plan (WSAP) (page 26) is also misleading in that it does not state that Preferential Rights is the statutory method for allocating MWD water during a time of shortage. Preferential Rights is discussed briefly much later in the Draft (page 50) but the two topics are not tied together. The discussion of Preferential Rights should also make clear that any “use” of Preferential Rights is at the discretion of the member agencies that hold the rights, not MWD.

The Draft should connect the discussion of Regional Water Resources (beginning at page 27) with the discussion of both MWD revenues (page 41) and Management’s Discussion of Historical and Projected Revenues (page 70) (Management Opinion). While MWD continues to project returning sales of 2 million acre feet, its discussion of seawater desalination programs alone shows potential reduced sales of almost 400,000 acre feet, exclusive of the many other local water supplies that are now being developed throughout the MWD service territory.

All of the information relating to the sale of discounted water is in the section on resources (page 30). The Draft should be revised to tie this discussion to Revenues (beginning at page 41) and should also be addressed in Management’s Opinion. By its own report, MWD chose to sell water at a discount in part because its member agencies would not pay full service rates for replenishment.
Chairman Foley and Members of the Board  
August 22, 2011  
Page 3

water. See MWD Board Memo dated May 10, 2011, a copy of which is attached, explaining that MWD water sales would only increase if water is sold at a discount due to the “budgetary or other financial constraints that the member agencies have” (Board Memo at page 3) and that offering water at full service rates would not “significantly increase the demand for replenishment water.” And yet, as noted above, the Draft excludes consideration of the impact of the cost of water on future MWD water sales. The Draft should describe how MWD’s sale of discounted water reduces full service water sales – reduces water sales revenues – and causes the cost of MWD’s full service water to escalate even higher as the true costs are spread among an even lower sales base.

In its May 10, 2011 Board memo recommending the sale of discounted water as replenishment sales, MWD staff asserted that the sales would increase current year (FY 2012) net revenues by $57.8 million (see “Options 3 and 4 Replenishment Service Program,” top of page 5). In their ratings reports in May 2011, the rating agencies relied on the promise of additional revenues from replenishment sales to help improve MWD’s fiscal position. However, four months into this eight-month discounted water sales period, MWD is not realizing “positive Net Revenue” as the board memo forecast. On the same day MWD staff released this Draft Appendix A for review by the board, our board heard reports in the Finance and Insurance Committee and the Engineering and Operations Committee that, taken together, foretell that the discounted water sales program will result in a net revenue shortfall of approximately $30 million in the current year, assuming 225,000 acre-feet of discounted water is sold by the end of December. In the Business and Finance Committee, the Board was informed that current year water sales are projected to fall short of budget projections by 13,000 acre-feet (assuming a budget based upon 1.8 MAF of sales; the Draft Appendix A says MWD’s FY 2012 forecast was for 1.85 MAF of sales). In the Engineering and Operations Committee, the Board was informed that MWD has already sold 118,000 acre-feet of discounted water, and has demands from the member agencies for 323,600 acre-feet of discounted water. Thus, it appears that projected sales of 1.787 MAF includes assumed sales of 225,000 acre-feet of discounted water. As we warned last May, discounted water sales are cannibalizing full-rate water sales, and will lead to a revenue shortfall this fiscal year of $30 million on the differential alone. This represents a nearly $90 million shift from the MWD staff prediction in May of “positive Net Revenue” of $57.8 million as a result of discounted water sales. MWD is likely to end FY 2012 with yet another revenue shortfall, making it the fourth year out of the past five years in which revenues were not sufficient to cover expenditures.

The Draft should include a discussion and cost estimate for the BDCP and potential impact on water rates. These projected costs of MWD’s imported water supplies are the measure by which current decisions are being made to invest in alternative local water supply development and are having an impact now on MWD water sales.

The Draft discloses the ongoing draw down of reserve balances in its discussion of the Capital Investment Plan (page 37), but does not tie these trends into Management’s Opinion. The Draft should also disclose the amount of the reserves that are currently held in escrow as a result of the San Diego County Water Authority litigation as well as amounts projected to meet future escrow requirements and the impact this will have on reserve balances.

The Draft should disclose that MWD has had the same external financial auditor for more than 19 years. Further, that a question has been raised regarding MWD’s treatment of its State Water Project contract for accounting purposes (see discussion at page 63).
The Summary of Receipts by Source (page 42) and Summary of Water Sold and Water Sales Receipts (page 43) should disclose receipts for the transportation of water by MWD. Although footnote 3 (page 44) states that “water sales” includes wheeling, the sale of water and the transportation of water are two completely different service functions.

The Draft’s Summary of Water Sold and Water Sales Receipts (page 43) also fails to disclose important information by reporting “Average Receipts Per Acre Foot.” Since no water is sold by MWD at “average” rates, MWD should disclose the amount of water it sells at full price and under discounted water programs.

The Draft should include a more detailed explanation of current and potential litigation. MWD is on notice of the additional claims the Water Authority intends to file including Rate Structure Integrity, Preferential Rights and Breach of Fiduciary Duty. The Water Authority has also informed MWD that it does not believe that current conservation and Local Resources Programs meet Proposition 26 or other legal requirements. The Water Authority has informed MWD that it does not believe that there is a legal basis for the sale of discounted water to some but not all MWD member agencies. Although the litigation is disclosed in the Draft (discussion of the rate structure at page 45), the litigation should also be noted in the discussion of MWD’s Principal Customers (page 49).

Agricultural water sales are discussed in the section entitled, “Classes of Water Service,” but should be tied to both Revenues and Management’s Opinion on future water sales. The Draft should note that agricultural water sales have historically accounted for as much as 150,000 acre feet or more of MWD’s total annual sales, but were less than 35,000 acre feet in 2010. Most of the water sales under the Interim Agricultural Water Program were to customers of the San Diego County Water Authority and are not expected to continue at full service rates when the IAWP terminates on January 1, 2013.

The Draft taken as a whole does not disclose the financial impacts to MWD of significantly reduced future water sales by MWD. The projected sales decline is significant. MWD’s 2000 Urban Water Management Plan (UWMP) projected that MWD would sell approximately 2.3 million acre-feet of water in 2020 (average year demand). By the time of its 2005 UWMP, MWD revised the 2020 projection downward to approximately 2 million acre-feet. MWD’s 2010 UWMP – adopted nine months ago – again lowered the 2020 projection, this time to 1.66 million acre-feet. In all, MWD’s current projected (average year) sales for 2020 are nearly 30 percent lower than it projected just 10 years earlier. The factors contributing to reduced MWD water sales are not accurately described in Appendix A.

The Draft notes in a footnote that disbursements exceeded revenues in the fiscal years ended June 30, 2008, 2010 and 2011. This is a material factor that should be discussed more fully in the Draft and included in Management’s Opinion, particularly in light of the likelihood that expenditures will once again exceed revenues in FY 2012.

For the reasons described above and in the Water Authority’s letter on the budget (Attachment 4), we do not believe that the projection of MWD’s water sales and water rates described in Management’s Opinion (page 68) are reasonable. We believe sales will be substantially less than described and that water rates will be substantially higher than described.
Chairman Foley and Members of the Board
August 22, 2011
Page 5

Please contact me if you have any questions.

Sincerely,

Keith Lewinger, on behalf of San Diego County Water Authority
Representatives on the MWD Board of Directors

cc: Jeffrey Kightlinger, General Manager
    Thomas DeBaker, Interim Chief Financial Officer
    San Diego County Water Authority Board of Directors

Attachments:
1. September 22, 2010 letter re: Appendix A
2. December 9, 2010 letter re: Appendix A
3. May 16, 2011 letter re: Appendix A
4. April 11, 2011 letter re: MWD Budget
5. August 15, 2011 letter re: Adoption of Long Term Conservation Plan
6. August 16, 2011 letter re: Member Agency Willingness to Sign Take-or-Pay Contracts and Request to Correct the Record of July 12, 2011 MWD Board of Directors Meeting
7. MWD Board Memo dated May 10, 2011 re: Sale of Discounted Water
August 16, 2011

Mr. Jeffrey Kightlinger  
General Manager  
Metropolitan Water District of Southern California  
P. O. Box 54153  
Los Angeles, California 90054-0153

Re:  Member Agency Willingness to Sign Take-or-Pay Contracts  
Request to Correct the Record of July 12, 2011 MWD Board of Directors Meeting

Dear Mr. Kightlinger:

During discussion of your business plan at the MWD Board of Directors meeting on July 12, 2011, Water Authority Director Lewinger asked if you would incorporate into your business plan several suggestions, including one specifically suggesting MWD secure take-or-pay contracts with its member agencies. In response, you stated that “...with respect to securing Board approval of firm take-or-pay contracts, we discussed this for two years in 2000-2002 and staff comments of the Water Authority at the time were against take-or-pay contracts.” Your statement is incorrect. In fact, the Water Authority has a long track record advocating that MWD obtain long-term take-or-pay contracts with its member agencies in order to stabilize its revenues and improve its fiscal sustainability. Indeed – please correct us if we are wrong – the Water Authority is the only MWD member agency that has indicated a willingness to make a firm funding commitment to pay for MWD spending programs.

Fifteen years ago, in 1996, the Water Authority made a proposal for a take-or-pay contract as outlined in its “Summary of Proposal to Resolve Colorado River and Rate Refinement Issues, dated April 22, 1996” (Attachment 1).

Later, as a part of the rate restructuring process for years 2000-2002, the Water Authority Board of Directors adopted, and then formally submitted a proposal to MWD’s Board of Directors entitled “Framework of Key Contract Terms, dated February 17, 2000” (Attachment 2). The basic premise of the framework was that member agencies should specify by contract the water and services MWD would provide and a formula by which the agency agrees to pay for the water and services. Details of a take-or-pay contract between the Water Authority and MWD are included in Attachment F of the proposed framework. The framework sought to address many of the fiscal challenges that existed then, but which have grown far worse over the past decade. We asked the question at that time, on page 6, item 8: “Given the magnitude of its expenditures, is there any legally enforceable method other than take-or-pay contracts that can provide MWD with the certainty it needs to assure its fiscal integrity and stability?”

A public agency providing a safe and reliable water supply to the San Diego region
Mr. Kightlinger  
August 16, 2011  
Page 2

As these documents — and many other comments by the Water Authority’s staff and MWD delegates over the years — reflect, the Water Authority has long advocated that take-or-pay contracts with MWD’s member agencies are necessary to address deficiencies in its revenue structure. Specifically, MWD continues to incur more and more fixed costs and debt obligations — amounting to more than 70 percent of its total costs — at the same time it has no financial commitments from its member agencies to pay for these costs. Instead, MWD continues to rely upon revenues from water sales, which today provide approximately 80 percent of MWD’s revenues and yet are highly variable. The gulf between MWD’s fixed expenses, at 70 percent, and fixed revenues, at 16 percent, is a key reason why MWD is in the worst financial crisis in its history.

More than 15 years ago, the MWD Water District Blue Ribbon Task Force (Blue Ribbon Task Force) found that the “greatest challenge” confronting MWD was the disconnect between its water supply planning process and its member agencies’ actual willingness to pay (or not pay) for MWD programs (see generally, Task Force Report, The IRP/Rate Structure Process and MWD Decision Making at pages 5-9 and The Integrated Resources Planning (IRP) process at pages 10-15). The Blue Ribbon Task Force found that:

- “An effective rate structure should generate sufficiently stable revenues to cover fixed costs” (page 15); and noted that,
- “Some of the member agencies most strongly supporting big-ticket projects...also had the most aggressive plans to reduce their future MWD water purchases and develop independent supplies.” (Page 23.)

In order to address MWD’s long term fiscal sustainability, the Blue Ribbon Task Force recommended that MWD’s rate structures should ensure coverage of fixed costs without substantial modifications based on water use or other variable factors (page 20).

More than 15 years have now passed since the Water Authority and Blue Ribbon Task Force independently recommended that MWD adopt fixed payment commitments to address the growing instability of MWD’s financial structure. At that time, the Blue Ribbon Task Force warned that, “[c]omprehensive rate structure revisions should not be further delayed, and pressing MWD revenue needs should be addressed as soon as possible.” (Page 21.) Unfortunately, as you noted during your August 10, 2010 IRP presentation in San Diego (full quotation is included at Attachment 3), the rest of MWD’s member agencies “…prefer it the way it is” and remain unwilling to sign take-or-pay contracts or other firm funding commitments to pay for MWD spending programs.

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1 A second Blue Ribbon Committee was established by the MWD Board of Directors in January 2010. It has issued a Report, dated April 12, 2011, which has not yet been addressed by the MWD Board of Directors. Although the principal purpose of the 2011 Blue Ribbon Committee was to consider trends and uncertainties over the next 50 years that could affect MWD, it noted the importance of ensuring that the MWD rate structure provide a stable level of revenues to cover fixed costs — and, that if MWD’s member agencies find they can procure water more cheaply and reliably from other sources, they will reduce their purchases from MWD. See generally, Report of the Blue Ribbon Committee dated April 12, 2011, Finances and Pricing, at pages 73-76.
Mr. Kightlinger  
August 16, 2011  

At the same time the MWD board has refused to ask or require MWD’s member agencies to commit to pay for MWD spending programs, it continues to adopt business and water resource plans that include massive spending for future State Water Project Bay Delta Conservation Plan costs, Integrated Resources Plan capital spending and long-term subsidy expenditures. While the Blue Ribbon Task Force appreciated the risk that was apparent more than 15 years ago (“MWD can no longer afford to build major facilities and hope that member agencies will buy enough water to pay for them over several years” (page 23)), MWD appears now to be reaching the breaking point due to reduced demands and implementation of member agencies’ ongoing plans to buy less water from MWD. MWD’s downward fiscal spiral is being hastened by the approval of more and more subsidies to its member agencies that will lead to even lower MWD sales – and revenues. Furthermore, the resumption of discount water sales by MWD in May of this year, which are displacing full service sales, will lead to even lower water sales revenues and continued operating budget shortfalls as MWD’s spending is not curtailed to match its lower water sales.

While MWD’s “Purchase Orders” are clearly no substitute for enforceable contracts, the expiration of the current Purchase Orders in December 2012 provides the board with another opportunity to address the deficiencies in the current financial structure and rate model. The Water Authority recommends that a board process be established as soon as possible to grapple with these issues. The Water Authority remains willing to execute a take-or-pay contract with MWD, and, to make the other tough decisions that are necessary in order to stabilize MWD’s revenues and fiscal sustainability.

MWD’s rising rates and debt burden, coupled with the lack of political will on the part of the MWD board to require its member agencies to commit to pay for MWD spending programs, is exactly the kind of political risk that was identified in the recent downgrade of our country’s credit rating by Standard & Poors. In May of this year, the rating agencies noted that while MWD is heavily dependent upon variable sales of water for its revenues, its member agencies are not obligated to purchase any water from MWD, a finding that appeared to be a factor in Fitch Ratings’ downgrade. We would like to work together with MWD staff and the rest of the board to avoid further downgrades of MWD’s credit ratings.

Finally, the Water Authority requests that you correct the record regarding the statements made by you at the July 12, 2011 Board meeting discussion on the business plan. This can be accomplished by appending this letter, with attachments, to the July Board meeting minutes, as well as incorporating this letter by reference and attaching it to the minutes of the August 2011 board meeting – and we request that you do so.

Sincerely,

Fern Steiner, on behalf of the Water Authority’s MWD Board Directors

cc: Water Authority Board of Directors  
    MWD Board of Directors  
    MWD Member Agency Managers
Attachments:

1. Summary of Proposal to Resolve Colorado River and Rate Refinement Issues, dated April 22, 1996
2. Framework of Key Contract Terms, dated February 17, 2000
3. Jeff Kightlinger quote from August 10, 2010 IRP presentation in San Diego
May 6, 2011

Jeff Kightlinger, General Manager
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Board Memo 5-1 – Sale of Discounted Water

Dear Jeff,

Thank you for responding to our April 25, 2011 letter regarding MWD’s proposed sale of discounted water to selected member agencies. We appreciate that water supply conditions in 2011 have improved significantly; however, the question before the board is what to do with the water that is now available to MWD.

You state in your letter that MWD will maximize the use of its storage assets in 2011 to store available supplies. Director Steiner has requested and you have agreed to provide detailed information how MWD will do that. Past MWD board reports show that MWD has ample storage and put capacity available to store all of the available water in MWD storage facilities. Indeed, by our calculation, even if all of the available water is stored by MWD – as we believe it should be – MWD’s storage will remain less than half full.

You also state that MWD will likely end the year with its regional storage reserves at the “highest levels in history”; however, this observation fails to take into account the fundamental shift in MWD’s water supply reliability planning which – unlike past history – now relies heavily upon the withdrawal of water from storage in dry years. That is why the Water Authority has supported MWD’s multi-billion dollar investment in storage facilities and agreements, which provide more than 5 million acre feet of storage capacity. Given this water supply strategy and investment, it is difficult to understand why MWD now has no intention of maximizing its investment in storage in a year like this, when water is available. MWD is barely out of a multi-year allocation, yet instead of filling its storage reserves, it wants to sell it at a discount.

The problems with the replenishment program have been previously documented and we will not repeat them here. MWD has been well aware of these concerns for many years but has failed to address the problems in any revised board policy or otherwise. Suffice it to say that the program does not provide benefits to MWD commensurate with the cost to MWD of the program. If MWD is intent on selling discounted water, then it should be made available to all MWD member agencies equally, not just to select agencies on the purported basis of a clearly flawed water supply management program.

On the financial side, the board memo and your letter are clear that under the discounted sales
proposal, MWD will not recover its fixed costs. This month’s staff report shows MWD’s FY 2011 sales have further dropped to 1.6 million acre feet (MAF), from the budgeted 1.93 MAF. Although short term cash flow may be improved by the proposed sale of discounted water, it has a deleterious effect on MWD’s financial position overall. We believe you know that MWD’s fiscal crisis is real – we would welcome the opportunity to work with you on finding real solutions.

Regarding your comments on the member agencies’ willingness to pay for current and future fixed costs, our comments were taken directly from the MWD board memo citing the member agencies’ “budgetary and fiscal constraints” as the reason they are not buying MWD water now at the full price that was assumed in the current fiscal year budget. Clearly, the sale of water at full price would be the preferred option because the region would achieve the same storage and water supply benefits and MWD would come closer to hitting its own budget, which is more than $150 million short that also threatens to leave reserves precariously low.

Finally, we believe you know that the Water Authority’s litigation has nothing to do with challenging State Water Project costs – the only question is how those costs should be allocated between supply and transportation. The Water Authority expects to remain one of MWD’s largest customers and to pay its fair share of MWD’s costs under its State Water Project supply contract. Indeed, to our knowledge, the Water Authority is the only MWD member agency that has actually offered to enter into a long-term contract with MWD for the purchase of State Water Project water and other supplies and services. With firm contracts, MWD could count on being able to cover its fixed costs, now and in the future. We would be happy to make a presentation to the board on the history of that offer as well as make a proposal for the future. We agree that MWD is in a fiscal crisis and the gimmicks being employed this year – including a “fire sale” of discounted water – will not solve or even address the real problem.

Sincerely,

Jim Bowersox  Lynne Heidel  Keith Lewinger  Fern Steiner
Director  Director  Director  Director

cc: Jack Foley, MWD Board Chairman
December 9, 2010

Brian Thomas
Assistant General Manager/Chief Financial Officer
Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, CA 90012

Dear Mr. Thomas:

We reviewed Appendix A of MWD’s Draft Official Statement, distributed to members of the Board of Directors on November 24, 2010 for an upcoming bond sale. We have a number of concerns. A principal concern is that the Draft Statement does not disclose MWD’s present and future reduction in water sales due to a variety of key facts.

2010 Integrated Resources Plan

The recently adopted 2010 IRP articulated a new untested business strategy for MWD that is different than the historical role it has played in importing supplemental water supplies to Southern California. The implementation of this strategy would result in an overdevelopment of supplies by at least 200,000 acre-feet in 2020 and as much as 500,000 acre-feet per year through the overdevelopment of local supplies – either by MWD directly, or developed in concert with MWD subsidies. This new strategy has significant cost implications that have not been adequately described in the IRP or disclosed in the Draft Official Statement and could result in reduced sales rather than increased sales by MWD in the future. We described our concerns in our October 11, 2010 letter to MWD (copy attached and incorporated herein by reference). The 2010 IRP showed an MWD demand ranging from 1.67 million acre-feet to 1.75 million acre-feet in 2015, depending on how aggressively MWD would pursue local resources development. MWD demand is projected to be even lower in 2035 at between 1.35 million acre-feet and 1.65 million acre-feet. These are significant projected reductions in MWD sales. The Draft Statement fails to adequately disclose this fact.

Moreover, a month after MWD’s board adopted the 2010 IRP, MWD staff released new water sales projections as part of its Long Range Finance Plan that show even lower potential sales by 2020, in a range from a low of 1 million acre-feet, a high of 2
million acre-feet and a “projected expected” sales of 1.6 million acre-feet. The financial impact on MWD of 400,000 to 500,000 acre-feet of lower sales represented by the “projected expected” forecast is significant, and MWD must reconcile this major discrepancy in its Appendix A.

In addition to these concerns, MWD must analyze and disclose applicable limitations on its ability to fund local projects anticipated by the IRP under its existing rate structure, and, subject to the new Constitutional limitations under Proposition 26 as recently passed by California voters.

**Projected Water Sales**
The projected sales for the near term are overstated given current and reasonably anticipated water sales. After a series of steep rate hikes (increasing Tier 1 Treated Rate by 55 percent between 2008 and 2012), water management actions including aggressive conservation messaging, cessation of discounted replenishment water sales, phasing out of the agricultural program rate, and the implementation of M&I water allocation, MWD has significantly lowered its water demand. For the 10-year period of 2000-2009, MWD’s annual water sales averaged 2.17 million acre-feet. This calendar year, MWD’s sales are projected to equal a multi-decade low of about 1.5 million acre-feet – nearly 700,000 acre-feet below past decade’s average (and 1 million acre-feet below its peak sales year) and importantly, 250,000 acre-feet below MWD’s budgeted amount. Staff reported just last month that MWD’s current year revenue is expected to be $120 million less than budgeted due to declining sales. This will put ever-increasing pressure to raise rates even higher, if not in CY 2012, then in following years.

We do not believe it is reasonable to assume MWD water sales will return to the 2 million acre-feet level in the time frame noted in the Official Statement, or, that it has the water supplies available to sustain sales in this range continuously. Moreover, as noted above, the implementation of the IRP could actually result in further reduction in MWD’s own water sales.

**Use of Bond Proceeds and Need for Funds**
Given today’s extraordinary upward rate pressure, and downward water sales trends, it is unclear why MWD is considering selling bonds at this time. We were informed by staff just last month due to lower water sales, MWD would be drawing down about $100 million from its Rate Stabilization Fund to help cover the impacts of low sales, resulting in reserves that are lower than the Board’s established minimum level. We should be reviewing all expenditures, including scrubbing the Capital Investment Program, to reduce rate pressure. Selling the bonds now would result in MWD needing to expend the money within the specified time – that does not make sense. MWD needs to first figure
out what its new CIP expenditures should be in the current fiscal situation, and sustained lower water sales before committing itself to spending additional funds.

In conclusion, we believe MWD’s exposure to sustained lower water sales is significant due to factors such as challenges to MWD’s supplies, implementation of SBX7-7, the adoption of the 2010 IRP, and high water rates’ impact on consumer demand; these factors must be disclosed in detail. As such, we request that the Draft Statement be modified to ensure MWD provides adequate disclosure to potential investors.

Thank you.

Sincerely,

Keith Lewinger
Director

Attachment

Cc: MWD Board of Directors
    Jeff Kightlinger, General Manager
    MWD Member Agency Managers
September 22, 2010

Brian Thomas
Assistant General Manager/Chief Financial Officer
Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, CA 90012

Dear Brian:

On the afternoon of September 16, you distributed to members of the Board of Directors Appendix A of MWD’s Draft Official Statement for an upcoming refunding bond sale and asked for comments to be submitted by noon today; given the tight deadline, we limit our comments in this letter and the attachments to only the most significant issues and concerns with Appendix A. These comments are presented to you by the four of us as directors representing the San Diego County Water Authority. We request that you respond to the questions presented in this letter and make the necessary modifications to Appendix A of the Official Statement before it is finalized and issued. We believe additional time is warranted to schedule a full board review of the issues noted in this letter and in our IRP Comment Letter discussed below.

2010 Integrated Resources Plan

On page A-3, fourth paragraph, MWD makes only passing reference – and does not disclose key facts – about its 2010 Integrated Resources Plan Update. The document states that the IRP “…is expected to be completed in late 2010.” In fact, the IRP is expected to be presented by MWD staff to the Board of Directors for adoption at its October 12, 2010 meeting – only 13 days after the initiation of bond sales covered by this Official Statement. Appendix A fails to disclose material facts about the 2010 IRP that should be disclosed to potential investors, including but not limited to MWD’s plan to develop so-called “buffer” water supplies in the amount of up to 500,000 acre-feet per year, at a cost of billions of dollars over the next 25 years. On September 10, 2010, the Water Authority submitted to MWD extensive comments on the IRP. A copy of that letter is attached and the questions and comments incorporated herein (IRP Comment Letter). We request that MWD provide a substantive discussion in Appendix A regarding potential legal and financial implications from the shift from MWD’s historic role as a supplemental imported water supplier to local water supply developer; that identifies the breadth of the IRP implementation strategies under consideration, and the extent of costs and future water rates that would be necessary to implement the IRP recommendation. Appendix A should also include a discussion – here and elsewhere – on the effects higher water rates are expected to have on MWD sales. Experience over the past several years clearly shows a nexus between sharply higher water.
rates and conservation (demand reduction) by customers (ratepayers). MWD should disclose the impacts of its IRP strategies that would lead to water rates exceeding $2,000 an acre-foot by 2035 if not sooner and the impacts increasing water rates would have on water demands on MWD. Further, as discussed at length in the IRP Comment Letter, how will MWD ensure that there will be customers to pay for its regional local water supply projects when so many agencies are in the process of developing local water supply projects of their own for which their retail customers will pay through retail water rates. This concern should also be discussed in connection with the renewal of purchase orders at page A-1.

We are also concerned that the discussion is misleading about the purpose and importance of the IRP in the development and implementation of the “Preferred Resource Mix.” Responding to questions about the necessity of CEQA review prior to adoption of the draft IRP update, MWD staff has stated that such review is not required because the IRP is not a document that controls future decision-making in a manner that could result in the possibility of a significant effect on the environment. However, MWD staff has also stated that it intends to take immediate action to implement projects and programs identified in the draft IRP should it be adopted by the Board. When viewed in its entirety, the discussion of the IRP and the Preferred Resource Mix suggest the IRP is viewed by MWD as a controlling document that would be the first step in the implementation of a major new supply program and would be subject to CEQA. If this is not the case, MWD must make that clear and should also provide assurance that CEQA compliance will be accomplished before any actions are taken to implement any of the programs or projects contemplated as part of the draft IRP’s Supply Buffer.

Seawater Desalination Project Subsidies

On page A-4 and again on page A-31, under Seawater Desalination, MWD mischaracterizes the Carlsbad seawater desalination project and the status of the incentive payment agreement with MWD relating to this project. MWD also fails to disclose the fact that MWD has initiated termination proceedings on incentive payment agreements with the Water Authority and its member agencies, and, that it is MWD that has refused to sign the Carlsbad Seawater Desalination Project agreement approved by its own board on November 10, 2009.

In the Seawater Desalination Sections of Appendix A on Pages A-4 and A-31, Metropolitan addresses the status of member agency agreements for incentive funding for seawater desalination projects, including the Water Authority’s incentive funding agreement. Metropolitan states that “SDCWA has not executed the proposed agreement.” This statement would mislead the reader to conclude that but for SDCWA’s execution, the agreement would be in effect today. That is not true. The Water Authority’s incentive funding agreement, approved by the Metropolitan Board on November 10, 2009 and by the Water Authority Board on December 17, 2009, includes rate structure integrity language that allows Metropolitan to terminate the agreement should the Water Authority file litigation to challenge Metropolitan’s rate structure. Following the Water Authority’s initiation of litigation in June 2010 (briefly discussed on page A-47) challenging Metropolitan’s rates and charges, Metropolitan’s Board initiated termination of existing Water Authority funding agreements that include rate structure integrity language. On August 25, 2010, in a letter to the Water Authority from Metropolitan’s General Manager (attached), the Water Authority was notified that “Metropolitan’s Board of Directors also directed staff to defer execution” of the Water Authority’s seawater desalination incentive funding agreement “…as termination proceedings would begin
immediately upon execution.” These facts regarding the Carlsbad Seawater Desalination Project agreement should be stated on pages A-4 and A-31.

Near-Term Delta Actions
On page A-25, under Near-Term Delta Actions, MWD discusses the potential supply benefit of the proposed Two-Gate System and other “near-term” actions to improve water supply and ecosystem of the Delta. However, MWD does not provide a timeline estimate of when it expects the Two-Gate project to be in place and producing improved supply reliability of approximately 150,000 acre-feet per year in certain years. We request an estimated operational date for the Two-Gate project be added to this discussion.

Five-Year Supply Plan
On page A-26, under Local Resources, MWD projects that 122,000 of additional, new supply could be online by 2014 from recycled water treatment plants, groundwater recovery plants, desalination plants and new hookups to existing recycled water plants. This figure seems optimistic based on the experience. If MWD indeed projects this level of implementation, it is not our belief that the costs associated with such level of local resources development have been included in the budget or water rates adopted for 2011 or 2012. We request that the estimated costs and associated water rate increases be added to this discussion. In addition, given the long lead time generally associated with the development of such projects, we believe MWD should describe the process by which it will be able to implement local projects of this magnitude within the timeline described in the O.S.

Significant Exposure to Reduced Sales
On page A-29, Appendix A describes a construction project that will provide an interconnection between the Antelope Valley-East Kern Water Agency and the Los Angeles Aqueduct. Under an agreement with MWD, the City of Los Angeles will be able to acquire and move into the LA Aqueduct supplies obtained independently of MWD. This section notes that the annual quantity of supplies moving into the LA Aqueduct through the interconnection is “…not to exceed the supplies lost to the City as a result of its Eastern Sierra environmental obligations, including water for the Lower Owens River Project and Owens Lake Dust Mitigation Project…” That amount, Appendix A notes, was 98,000 acre-feet from April 2009 to March 2010. However, MWD does not disclose that the City of Los Angeles currently purchases water used to offset the use of its own Eastern Sierra supplies for environmental purposes from MWD, and that the interconnection with AVEK will allow LA to reduce its purchase from MWD on an acre-foot-for-acre-foot basis. Reduction of sales by approximately 100,000 acre-feet per year will have a material effect on MWD revenues and on MWD’s water rates. And yet, on page A-30, MWD asserts that the City of LA’s “future reliance on Metropolitan supplies may increase with implementation of these (Eastern Sierra environmental) projects.” The motivation for LA to pursue the interconnection with AVEK in the first place is its apparent belief that it can acquire independent supplies at a lower cost than MWD’s supply cost. Therefore, in contrast to the statement on page A-30, it is more likely LADWP will acquire any additional environmental offset water needed from sources other than MWD.

Future Water Sales and Receipts
On Page A-69, and again at A-71 to A-72, MWD projects steady growth in water sales over the next five years from 1.77 million acre-feet in the current fiscal year (2011), to 2.11 million acre-feet in FY 2015, “…reflecting a return to average weather conditions.” This projection appears to attribute the current low water demands on MWD (and reduced sales) to a single factor: weather. A return to
normal weather, the report implies, will result in returning sales to pre-shortage levels. No discussion or consideration is provided to what effect other factors – most notably higher water rates – have had, and continue to have in suppressing water demand and sales. The O.S. also fails to discuss or take into account the recently passed 20x2020 legislation requiring 20% conservation at the retail level. Appendix A should provide an analysis of the impacts higher water rates and conservation requirements are having on demand and sales, and factor those impacts into projections of future water sales (e.g. the next five fiscal years and beyond).

Page A-72 notes that because of lower-than-budgeted water sales in the current year (160,000 acre-feet lower than budgeted), MWD will make a draw of $34 million from its Water Rate Stabilization Fund. However, on September 17, 2010, at the MWD Member Agency Managers meeting, MWD management reported that the net draw from the Water Rate Stabilization Fund this year is projected to be $100 million. MWD should reconcile these two figures and ensure the number reflected Appendix A is the correct one.

We believe the comments contained in this letter and the attachments must be addressed through substantive modifications to Appendix A and request those changes be made to ensure MWD provide accurate and adequate disclosure to potential investors.

Thank you.

Sincerely,

Lynne Heidel     Keith Lewinger
Director     Director

Bud Pocklington     Fern Steiner
Director     Director

Attachments

Cc: MWD Board of Directors
    Jeff Kightlinger, General Manager
Dear Directors:

Your letter dated October 8, 2012, regarding Board Letter 8-3—Approve the form of the amended and restated Purchase Order and authorize amendment of Section 4122 of the Administrative Code

Chairman Foley asked me to respond to your letter regarding the form of amended and restated Purchase Order approved by the Board on October 9, 2012.

Your letter contains detailed comments and concerns, most of which were addressed in the staff presentation at the Finance and Insurance Committee on October 8, 2012, and the committee discussion. We will not address them again here. The purpose of this response is to correct your assertion that the Board’s action on November 8, 2011, approving the City of Compton’s request to withdraw its purchase order, is a new policy that should be included in the amended purchase orders.

The November 2011 board letter explained Compton’s reduced water purchase trend due to operational changes that occurred after execution of its purchase order. Upon withdrawal of the purchase order, Metropolitan revised Compton’s Tier 1 limit and will require Compton to pay the Tier 2 Supply Rate on any future water purchases over the revised lower limit.

The Board’s action last November approved only the Compton purchase order withdrawal. If other member agencies make similar requests, they must meet the same conditions, but the Board would consider similar requests from other member agencies individually. This is required under
SDCWA Directors  
October 30, 2012  
Page 2

Administrative Code Section 4404(b) and consistent with the November 2011 board letter. Thus it is not accurate to characterize the November action as a generally-applicable board policy or appropriate to include it in the amended and restated purchase orders.

Sincerely,

[Signature]

Gary Breaux  
Assistant General Manager/Chief Financial Officer

cc: MWD Board of Directors  
SDCWA Board of Directors
Extension of Purchase Orders

Finance & Insurance Committee
Item 8-3
October 8, 2012
Purchase Order Extension

- Two-year extension
  - To December 31, 2014
  - Amendment retains existing terms and conditions
  - PO Commitment adjusted to 12 years instead of 10 years
  - PO Commitment based on Initial Base Firm Demand as calculated in 2002; no changes to this calculation
  - Housekeeping for definitions

Calendar Year 2013 Tier 1 limits incorporate maximum adjustment for the IAWP phase-out
  - Consistent with the October 2008 Board Action
Purchase Order Extension Applicability

3 member agencies without Purchase Orders cannot now execute Purchase Orders

23 member agencies with existing Purchase Orders may choose to execute the Purchase Order Extension
Purchase Order Extension Impacts

- Establishes a member agency’s annual Tier 1 limit
- Retains Tier 2 price signal
  - Provides an incentive to invest in conservation and local projects
- As of the August 2012 invoicing, 19 of the 23 member agencies with Purchase Orders have met the twelve-year Purchase Order Commitment resulting from the extension
  - Burbank, Glendale, Central Basin Municipal Water District, and San Diego County Water Authority have not yet met the additional commitment
Administrative Code Change

- Amend section 4122. Base Firm Demand; Initial Base Firm Demand
- Incorporate the impact of the phase-out of the Interim Agricultural Water Program (IAWP) on the calculation of the Base Firm Demand effective January 1, 2013
  - Recalculation of the Initial Base Firm Demand to account for IAWP sales during FYs 1990-2002
  - Calculation of the ten-year rolling average is unchanged
Board Options

Option #1 – Adopt CEQA determination and

Approve the Amended and Restated Purchase Order to provide a two-year extension of existing member agency Purchase Orders

Authorize the General Manager to execute the Amended and Restated Purchase Order with member agencies opting to extend their Purchase Orders; and

Authorize amendment of section 4122 of the Administrative Code

Option #2 –

Do not approve the Amended and Restated Purchase Order or Administrative Code changes
Staff Recommendation

Option # 1
Item 8-3: Approve the form of the amended and restated Purchase Orders; and authorize amendment of section 4122 of the Administrative Code
Presented by June Skillman, Financial Planning Manager, MWD
Finance and Insurance Committee Meeting
October 8, 2012

Skillman (17:37): Thank you Vice Chair Barbre. Giving myself a minute here to get set-up.

Item 8-3 is the extension of the purchase orders. We came to the committee last month and discussed a request by the member agencies for an extension of the purchase orders. We had been talking to the member agencies and been bringing back to the board a proposal where we would align our rate structure and water management objectives. And we did receive feedback from the member agencies that they didn’t believe that they had enough time to review that proposal and discuss it with their sub-agencies to understand the impacts and requested that we consider an extension of the purchase orders to give them additional time while we talked about this proposal.

So, what we have before you is an extension of the purchase order. It is a two year extension. The purchase orders would extend to December 31, 2014; they’re currently set to expire December 31, 2012, this year. The amendment retains the existing terms and conditions of the Purchase Order. The Purchase Order commitment itself is adjusted to 12 years instead of 10 years. The calculation of the Purchase Order commitment is still based on the initial base firm demand as it was calculated in 2002; there’s no change to that calculation. All we’ve done is we’ve take that calculation times 60 percent times 12 years instead of 10 years to determine the commitment for the agencies who want to sign it for the extension.

We do have some house-keeping for definitions; I’ll be going over those. So, why don’t we do that right now? There was a question about why we didn’t address this as a letter amendment to the Purchase Order instead of developing an Amended and Restated Purchase Order. And in your packet, Attachment 1 is a clean-line version of the Amended and Restated Purchase Order. And in your packet, Attachment 1 is a clean-line version of the Amended and Restated Purchase Order. Attachment 2 is a red-line version. And as we were working through it, what we found is that there were a number of issues that we needed to clarify and clean-up. And as we tried to work through that as a letter agreement it actually became quite complicated because we had to make a reference back to each particular item that we were referring to. So it became actually very difficult to follow the later agreement and we found it was easier just to do a red-line version of the Purchase Order itself.

One of the things we did find some discrepancies in terms that were used in the Purchase Orders it was originally constructed and we’ve clarified those. So in a number of places we had the phrase “base demand” and we’ve changed that to be “base firm demand” which is consistent with the Administrative Code. Also the Purchase Order was, as it was constructed reflected Metropolitan’s world as it existed in 2002 and at that time we had Firm water, Interim Agricultural Water Program water and Long-Term Seasonal Storage water. Since that time we’ve actually developed a number of water programs and the language in the Purchase Order didn’t really contemplate those changes. So in a number of places we had a phrase that said “excluding deliveries of system water made under the Interim Agricultural Water Program and the Long-Term Seasonal Storage Service.” We added the phrase “including, but not limited to,” and the reason we did that is so we can incorporate changes as we make them. And as an example of some of the things that we’ve done since 2002, the Long-Term Seasonal Storage Service Program became the Replenishment Service Program; we implemented the surface storage operating agreement,
the recharge and recovery operating agreement, supplemental storage program, water supply allocation plan, Storage Program, and Conjunctive Use Program. And so we’ve added the phrase “including, but not limited to” so we can give ourselves the flexibility of developing programs not only what we’ve done in the last ten years, but we might do in the next two years. So that really is the change to the Purchase Order itself.

We’ve also cleaned-up some of the definitions and this gets to the second item. In the original Purchase Order, member agencies’ based firm demand, which determined their Tier 1 limit was, went back to the initial based firm demand or a ten-year rolling average. In October of 2008, the Board took action to eliminate and phase-out the Interim Agricultural Water Program. Effective January of 2013 those member agencies who were actively participating in the IAWP Program will have their Tier 1 limits changed to incorporate the full phase-out and the adjustment to their Tier 1 limits. So the concept of initial base firm demand post-IAWP is important to be reflected in the Purchase Order separate and distinct from initial base firm demand because they’re being used in two different ways.

In terms of the applicability of the Purchase Order extension, as you will recall we have three member agencies who do not have executed Purchase Orders; at this point in time they cannot execute a Purchase Order. The remaining 23 member agencies with existing Purchase Orders may choose to execute the Purchase Order extension but do not have to, depends on your individual circumstances.

Why this is important and the impacts to the member agencies, you’ll remember that the Purchase Orders expires December 31 of this year. And absent an action by the Board every member agencies’ Tier 1 limit would revert to 60 percent of their initial base firm demand post-IAWP. So the Purchase Order extension is important because it establishes a member agency’s annual Tier 1 limit. If you execute the Purchase Order it’s gonna be 90 percent of your base firm demand. If you don’t execute the Purchase Order it will be 60 percent of your base firm demand effective for Calendar Year 2013. It continues to retain the Tier 2 price signal. And the Board has told us that that Tier 2 price signal is important because it provides an incentive to invest in conservation and local projects. As of the August 2012 invoicing, 19 of the 23 member agencies with Purchase Orders have met the 12 year Purchase Order commitment that results from the extension. The agencies that have not met that are Glendale, Burbank, Central Basin Municipal Water District, and the San Diego County Water Authority.

We are proposing an Administrative Code change and hopefully I touched on why that’s important. For purposes of calculating the Purchase Order commitment we’re using the original initial base firm demand concept as it was included in the Purchase Orders and defined in 2002. However, for calculating a member agency’s base firm demand for 2013, we need to use the initial base firm demand post-IAWP so we’ve included in the Administrative Code a description of how we’re calculating that and what it means. And importantly, the calculation of the 10-year rolling average is unchanged by all of this; it is still the 10-year rolling average of firm demands for a 10-year period.

And so the Board options that we have is Option 1 is to adopt the CEQA determination and approve the Amended and Restated Purchase Order, to provide a two-year extension of existing member agency Purchase Orders; authorize the General Manager to execute the Amended and Restated Purchase Order with member agencies opting to extend their Purchase Orders; and authorize amendment of section 4122 of the Administrative Code.

Option 2 is not to approve the amended and restated Purchase Order. And that, staff’s recommendation is Option 1. If there are questions...
Barbre: OK. Thank you. I’ll entertain a motion on that. To move which Option? Option 1? It’s been moved, seconded. Any comments, any questions? Director Wilson.

Wilson: Thank you Mr. Chair. As you mentioned earlier, the County Water Authority delegates have submitted a letter on this item earlier this morning. And while we, we can, we’re prepared to recommend approval of the actual commitment to our Board of Directors; we cannot agree to the execution of the new terms and conditions. We would’ve preferred to have a more simple approach with just the extension of the commitments. We didn’t see a need to change all those terms and conditions. So with that, you know, I’ll be voting no on behalf of the delegates. And we would ask this be part of the Administrative Record.

Barbre: Ok dually noted. Any other comments, questions? Ok any opposition? We have one opposition, any others? Ok the motion carries with one opposition. Thank you very much.
November 21, 2012

Attention: Imported Water Committee

Metropolitan Water District’s Purchase Order History. (Information)

Purpose
This report presents Metropolitan Water District’s Purchase Order history and gives the board background to provide staff direction on the extension of purchase order.

Background
In March 2002, MWD adopted a new rate structure. At that time, it also created a “Purchase Order,” the stated objective of which was to secure financial commitment for MWD. Member agencies executing a Purchase Order would be allowed to purchase a greater volume of water at MWD’s more favorable Tier 1 water rate. The Purchase Order was for a 10-year period ending on December 31, 2012. At its June 2002 meeting, the Water Authority Board approved execution of a Purchase Order with MWD.

Under the existing Purchase Order, an “Initial Base Demand” equal to the MWD member agency’s highest annual “Firm Demand” in any fiscal year during the period 1989/90 through 2001/02 was calculated for each agency. The Base Demand was defined as greater of (i) the Initial Base Demand or (ii) the ten-year rolling average of the agency’s “Firm Demand.” “Firm Demand” was in turn defined as purchases of “non-surplus “System Water” supplies, including full service and seasonal shift deliveries. “System Water” was described as, “water supplies developed by Metropolitan and delivered to the Purchaser through the System or other means.”

As calculated under the Purchase Order, the Water Authority agreed that it would purchase at least 60 percent of its Initial Base Demand multiplied by 10 over the 10-year period expiring December 31, 2012. Agencies that executed Purchase Orders could purchase up to 90 percent of the Base at the Tier 1 rate, while agencies that did not execute Purchase Orders could purchase only up to 60 percent of the Base at the Tier 1 rate. Any agency that executed a Purchase Order and purchased less water from MWD than specified in the Purchase Order would be required to pay MWD the difference between the Purchase Order and actual purchases, multiplied by the average of the Tier 1 supply rate in effect during the term of the Purchase Order. In this event, the member agency would only be required to pay the supply rate, and is not obligated to pay any other rates and charges, including the System Access Rate, System Power Rate or Water Stewardship Rate.

Because a member agency has 10 years to purchase the total volume of water stated in the Purchase Order, and because MWD does not allocate the entire cost of water on its supply rate (a central point in the Water Authority’s pending rate litigation with MWD), the Purchase Order never achieved its stated purpose of providing a significant amount of firm revenues to MWD. In November 2011, the MWD board voted to allow the City of Compton to terminate its Purchase Order in exchange for payment of a $5,000 administrative fee. The MWD Board Memo dated November 8, 2011 stated that, “If other member agencies request to withdraw their Purchase
Order commitment, the same conditions for Tier 1 and Tier 2 payments and the administrative withdrawal fee would apply.”

Of MWD’s 26 member agencies, 24 executed a Purchase Order – all except San Marino and San Fernando. With the City of Compton terminating its Purchase Order last November as noted above, currently 23 of the member agencies have a Purchase Order with MWD.

Discussion
MWD has historically used its Long Range Finance Plan (LRFP) process to assess and update its financial policies, water rates and long-term planning projections. However, its current LRFP – adopted by the board in 2004 – has not been updated. Over these past eight years, there have been substantial changed circumstances that are not accounted for in MWD’s core water supply and financial planning documents.

MWD staff began a process to update the LRFP in 2007, working with the member agency managers and providing occasional PowerPoint presentations to the MWD board of directors. The Water Authority delegates have repeatedly requested and strongly urged both MWD management and the MWD board of directors to review and address key water supply and financial planning issues. It has been clear for a very long time, for example, that MWD’s water sales have been substantially less than forecasted and its water rates have far exceeded those projected in its 2004 LRFP.

The 2007 process was titled by MWD staff as the, “Long Range Finance Plan —Rate Structure” process. One of the early key objectives was to develop a strategy to address the fact that MWD’s fixed costs far exceed its fixed revenues, and, to plan for the expiration of the Purchase Orders in 2012. An important objective for the Water Authority in this discussion was for MWD to better align recovery of its fixed costs with the agencies that benefit from the costs being incurred to provide standby or “peaking” capacity. This process went forward in fits and starts over the past eight years. However, it became increasingly clear that MWD’s member agency managers are far more interested in shifting financial risks to MWD and securing subsidies and discounted water from MWD than they are in having their agencies make firm commitments to pay MWD’s current or future costs.

In June of this year, MWD reconvened the member agency managers but eliminated any reference to developing an updated LRFP. (For more information on the LRFP process, see September's board information item titled, “Metropolitan Water District’s Rate Refinement Discussion.”) MWD’s Assistant General Manager/Chief Financial Officer (“CFO”) has recently stated that MWD no longer needs a LRFP and that he will, instead, be managing long term planning by providing a five-year rate forecast through the biennial budget process. The Water Authority delegates have stated that they do not believe that a five-year look-ahead is sufficient to support the level of investment MWD has described in its Integrated Resources Plan or that would be required to support funding the Bay Delta Conservation Plan project.

The CFO and other MWD staff have expressly acknowledged that MWD’s “Purchase Orders” do not achieve the stated objective of providing MWD increased firm revenues or financial
stability at a meaningful level. However, staff recommended, and the board approved in October “extension” of the Purchase Orders for an additional two years (changing the term from 10-years to 12-years). MWD said that its member agencies told them there had not been enough time to evaluate alternatives, in spite of the fact that rate issues had been under discussion since 2007. MWD has also indicated that it will now, once again, defer any further discussion of financial issues to 2013. The only exception is that ongoing discussions about reinstituting discounted water sales to the member agencies through a new storage program (or, sale of discounted water for replenishment) will continue in the Water Planning and Stewardship Committee.

MWD’s Purchase Order was designed to create the appearance of a “contract” without any meaningful exchange of consideration on the part of either party. Likewise, the 2012 Revised Purchase Order does not represent a meaningful “commitment” of any kind by the member agencies to purchase MWD water – because most of them have already bought more water than required under the 2012 Revised Purchase Order. MWD staff reported in October, of the 23 member agencies that have Purchase Orders with MWD, 19 have already purchased enough water to meet not only their 10-year, but also their revised 12-year “commitment.” Thus, as to these agencies, signing the two-year extension will not obligate them to purchase even acre-foot of water. The Water Authority has already exceeded its 10-year target of 3,342,570.6 AF, and in fact, by October 30 it has purchased 4.028 MAF of firm water from MWD -- enough to reach the new 12-year target.

Even if it does not execute the 2012 Revised Purchase Order, the Water Authority is not at risk of exceeding the Tier 1 annual limit that would apply without a Purchase Order because the limit far exceeds the Water Authority’s projected demand on MWD for 2013 and 2014.

Moreover, MWD’s Purchase Order and 2012 Revised Purchase Order are not based upon, or consistent with the cost of service requirements MWD is legally required to follow in setting its water rates and charges for the services it provides.

Based solely on the Water Authority’s projected demand on MWD, it would be indifferent to signing an extension of the Purchase Order to “commit” to buy water it is already going to buy. However, because MWD staff recommended and the board approved an “Amended and Restated Purchase Order” that contained unexplained changes to the existing terms and conditions, the Water Authority’s delegation objected to these terms. See the Water Authority Delegation’s letter to MWD dated October 8, 2012 (Attachment 1).

The Purchase Order’s relationship to the MWD rate litigation will be discussed in closed session (Committee agenda item IV-2).

Prepared by:  Debbie S. Discar-Espe, Senior Water Resources Specialist
Reviewed by:  Amy Chen, Director of MWD Program
Approved by: Dennis A. Cushman, Assistant General Manager

Attachment 1: Water Authority Delegation’s letter to MWD re Purchase Order dated October 8, 2012
October 8, 2012

Jack Foley, Chair of Board
and Members of the Board
Metropolitan Water District
P. O. Box 54153
Los Angeles, CA 90065-0153

RE: Board Memo 8-3 – Approve the form of the amended and restated Purchase Order; and authorize amendment of section 4122 of the Administrative Code

Dear Mr. Foley and Board Members,

We have reviewed Board Memo 8-3 including Attachments. We are prepared to recommend to the Water Authority board of directors renewal of the purchase order commitment for two years, to December 31, 2014, “under the existing terms and conditions,” in accordance with the recommendation stated in the “Executive Summary” at page one, paragraph one of the board memo and as reflected in Attachment 3, Page 1 of 1, 2013, Tier 1 Limit and 2003 – 2014 Purchase Order Commitment. However, we are unable to recommend execution of the new form of Purchase Order which contains unexplained changes to the existing terms and conditions.

The “Details” section at page one, paragraph two of the board memo states that the new form of agreement contains amendments to definitions “to align the Purchase Orders with water programs implemented since the 2002 execution of the Purchase Order.” However, there is no explanation provided of the “alignment.” In fact, none of the definitional changes are necessary in order to achieve the stated objective of extending the purchase order for an additional two years under the existing terms and conditions or to “align” the Purchase Order to “new water programs.” The extension of the purchase order commitment could be accomplished simply by amending Section 4122 and the Purchase Order to reflect a “twelve-year” instead of a “ten-year” rolling average of deliveries of water (subject to adding one additional board policy change noted below).

Instead of presenting this simple amendment, however, an “amendment and restatement” of the Purchase Order is proposed. A contract amendment does not replace the whole original contract (just the part that’s changed by the amendment, here, a simple change from ten-years to twelve-years). Only when a contract requires extensive changes is it the common practice to create an entirely new agreement in the form of an “amendment and restatement.”

For example, a number of terms that are not defined in Metropolitan’s Administrative Code or included in its cost of service analysis are used in the new form of Purchase Order (e.g., “non-interruptible System Water supplies,” and “Recharge and Recovery Operating Agreement

A public agency providing a safe and reliable water supply to the San Diego region
water,” among others). The edits to the definitions are unnecessary and whatever the intent, the proposed amendments are inconsistent with the explanation being provided by staff that the Purchase Orders are being extended under the “existing terms and conditions.”

Finally, while staff has included a number of unexplained changes to the form of the Purchase Order, it has left out the only policy change that has actually been adopted by the board of directors. That is that any member agency may withdraw and terminate its Purchase Order commitment upon the payment of a $5,000 administrative withdrawal fee. See November 8, 2011 Board Memorandum 8-3, adopted by the board on the same date. This provision should be included in the amended Purchase Order commitment.

In closing, we reiterate the concerns expressed in our September 10, 2012 letter to you RE Update on Rate Refinement (Board Information Item 7-b) (copy attached) including the inefficacy of Metropolitan’s Purchase Orders to achieve the objective of securing a revenue stream sufficient to pay Metropolitan’s costs, or, to provide a reasonable basis for the planning and provision of long term capital facilities and water supply programs. Metropolitan’s staff has acknowledged that Purchase Orders do not achieve these objectives, and yet, these critical financial decisions are being deferred for another two years. We are troubled by the continued spending patterns and practices at Metropolitan which do not provide sufficient fixed revenues at the same time the member agencies and board members are unable to agree how these fixed costs will be paid for over the long term. The trend and signals that we see are that Metropolitan’s member agencies intend to purchase less, not more water from Metropolitan. The continued spending could result in substantial stranded costs as well as massive rate hikes that would be necessary to pay for these programs with a declining sales base.

We assume other agencies will be required to obtain the approval of their governing boards. Our recommendations to the Water Authority’s board of directors will be as described in this letter.

Sincerely,

Keith Lewinger  Fern Steiner  Doug Wilson
Director  Director  Director

Attachment

cc: San Diego County Water Authority Board of Directors
Office of the General Counsel

January 4, 2013

Daniel S. Hentschke, Esq.
General Counsel
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Mr. Hentschke:

Re: Amended and Restated Purchase Order for System Water to be Provided by the Metropolitan Water District of Southern California

Thank you for your December 27, 2012 letter to Gary Breaux. Your letter (enclosed for reference) states that the San Diego County Water Authority (SDCWA) Board of Directors authorized its General Manager to sign the “Amended and Restated Purchase Order for System Water to be Provided by the Metropolitan Water District of Southern California” under protest and with a full reservation of rights based on your claims that execution of the agreement is an act of form over substance and that the agreement is illusory, lacks consideration, contains false recitals, does not represent a mutual agreement, and is illegal.

Metropolitan disagrees completely with each and every one of your statements. As you know, mutual consent and the intent to be legally bound is necessary for contract formation, and it is clear by your statements, SDCWA’s failure to timely provide executed originals for execution by Metropolitan, and your failure, as agency counsel, to approve the agreement as to form and content, that SDCWA does not intend to recognize the validity of, or to be bound by, this purely voluntary agreement. Metropolitan cannot execute the Amended and Restated Purchase Order under these circumstances. The existing rate structure, including Tier 1 limits for member agencies that have declined to enter into voluntary purchase orders, will therefore govern continuing water service to the SDCWA.

Very truly yours,

Marcia Scully
General Counsel

Enclosure
cc: G. Breaux
    Metropolitan Water District of Southern California Board of Directors
    San Diego County Water Authority Board of Directors
January 14, 2013

Marcia Scully
General Counsel
Metropolitan Water District
of Southern California
Box 54153
Los Angeles, CA 90054-0153

Re: Amended and Restated Purchase Order for System Water to be
Provided by the Metropolitan Water District of Southern California

Dear Ms. Scully:

Responding to your letter of January 4, 2013, it is perfectly clear that the Water Authority timely approved, executed, and provided to Metropolitan a fully executed Amended and Restated Purchase Order. The Water Authority General Manager executed the agreement within the scope of authority delegated by the Water Authority board of directors. There is no requirement for my approval “as to form and content” as asserted in your letter. The Water Authority remains ready and willing to stand and be bound by its commitment to purchase at the Tier 1 price the purchase order commitment amount stated therein. However, the Water Authority cannot and will not, by execution of the purchase order, waive its rights to challenge Metropolitan’s unlawful practices or actions, or otherwise compromise positions the Water Authority has asserted in litigation challenging Metropolitan’s rates. It is Metropolitan, not the Water Authority that has dictated the terms of the Amended and Restated Purchase Order, and it is Metropolitan, not the Water Authority that has refused to enter into the agreement because the Water Authority has refused to waive its rights.

Sincerely,

Daniel S. Hentschke

Attachment: October 16, 2012 E-Mail re: Purchase Order Extension

cc: MWD Board
SDCWA Board
**Espe, Debra**

**Subject:** FW: Purchase Order Extension  
**Attachments:** san diego.pdf

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**From:** Gonzales, Joann [mailto:igonzales@mwdh2o.com] On Behalf Of Breaux, Gary M  
**Sent:** Tuesday, October 16, 2012 1:37 PM  
**To:** Lichtenberger, Julia  
**Cc:** Breaux, Gary M; Skillman, June M; Chen, Amy; Shank, David; Cushman, Dennis; Greek, Rod  
**Subject:** Purchase Order Extension

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**Date:** October 16, 2012  
**To:** Member Agency Managers  
**From:** Gary Breaux, Assistant General Manager/Chief Financial Officer  
**Subject:** Purchase Order Extension

Please find attached your Amended and Restated Purchase order. If you choose to execute the Purchase Order, execute two original copies and forward them to Metropolitan. We will execute both copies, retain one, and return the other executed original to you. If you need more than one original for your files, adjust the number of executed originals you send to Metropolitan accordingly. The Amended and Restated Purchase Order must be fully executed by December 31, 2012.

If you have any questions, please contact June Skillman at 213-217-6216, or jskillman@mwdh2o.com.

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The information contained, together with any attachments or embedded links, is for the sole use of the intended recipient(s) and may contain information that is confidential or legally protected. If you are not the intended recipient, you are hereby notified that any review, disclosure, copying, dissemination, distribution or use of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately by return e-mail message and delete the original and all copies of the communication, along with any attachments or embedded links, from your system.
January 16, 2013

Attention: Imported Water Committee

CLOSED SESSIONS:

Conference with Legal Counsel – Existing Litigation
Government Code §54956.9(a)
Name of Case: QSA Judicial Council Coordination Proceeding No. 4353

Conference with Legal Counsel - Existing Litigation
Government Code §54956.9(a)
Name of Case: State Water Resources Control Board (SWRCB)
Imperial Irrigation District and San Diego County Water Authority
Joint Petition for Modification of Revised Order WRO 2002-0013
(Permit 7643, Application 7482)

Purpose
This memorandum is to recommend closed sessions, pursuant to Government Code §54956.9(a) to discuss the above-referenced matters at the January 24, 2013, meeting.

Closed sessions have also been included on the agenda of the formal Board of Directors’ meeting. Unless the Board desires additional discussion, it is not staff’s intention to ask for closed sessions with the full Board at that time, but staff may request action to confirm directions given or action recommended by the committee.

Prepared by: Daniel S. Hentschke, General Counsel
January 16, 2013

Attention: Imported Water Committee

CLOSED SESSION:
Conference with Legal Counsel - Existing Litigation
Government Code §54956.9(a) - SDCWA v Metropolitan Water District of Southern California; Case Nos. CPF-10-510830 and CPF-12-512466

Purpose
This memorandum is to recommend a closed session, pursuant to Government Code §54956.9(a) to discuss the above-referenced matters at the January 24, 2013, meeting.

A closed session has also been included on the agenda of the formal Board of Directors’ meeting. Unless the Board desires additional discussion, it is not staff’s intention to ask for a closed session with the full Board at that time, but staff may request action to confirm directions given or action recommended by the committee.

Prepared by: Daniel S. Hentschke, General Counsel
LEGISLATION, CONSERVATION AND OUTREACH COMMITTEE

AGENDA FOR

JANUARY 24, 2013

Bob Topolovac – Chair
Gary Croucher – Vice Chair
Jim Madaffer – Vice Chair
David Barnum
Brian Boyle
Marilyn Dailey
Farrah Douglas

Frank Hilliker
Dennis Lamb
Ron Morrison
Mark Muir
Vince Mudd
Yen Tu
DeAna Verbeke
Barbara Wight

1. Roll call – determination of quorum.

2. Additions to agenda (Government Code Section 54954.2(b)).

3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

4. Chair’s report.
4-A Directors’ comments.

I. CONSENT CALENDAR

II. ACTION/DISCUSSION

1. Legislative Issues.
1-A Report by Carpi and Clay. (supplemental materials)

   Staff recommendation: Authorize the General Manager to execute an agreement with San Diego Gas & Electric Company to implement water and energy efficiency programs. (Action)

III. INFORMATION

1. Presentation on Online Residential Water Use Calculator.
2. Quarterly Water Conservation Garden report.  
   John Linden

   Jeff Volberg

IV. ADJOURNMENT

Doria F. Lore
Clerk of the Board

NOTE: This meeting is called as an Legislation, Conservation, and Outreach Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.
January 16, 2013

Attention: Legislation, Conservation and Outreach Committee

Partnership Agreement with San Diego Gas & Electric Company for Water and Energy Efficiency Programs (Action)

Staff recommendation
Authorize the General Manager to execute an agreement with San Diego Gas & Electric Company (SDG&E) to implement water and energy efficiency programs.

Alternatives
Do not authorize the General Manager to enter into an agreement.

Fiscal impact
Under the terms of the agreement, SDG&E will fund up to $679,280 in professional services and the Water Authority will fund up to $150,000 in water efficiency hardware. Of the Water Authority’s funding contribution, $50,000 will come from existing funds within the Public Outreach and Conservation Department’s fiscal years 2012-2013 operating budget. The Water Authority will seek state grants to fulfill its remaining $100,000 funding contribution. The rate category is Customer Service. The table below provides a breakdown of the funding sources.

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<th>SDCWA</th>
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Background
Over the last five years, the focus on the relationship between water use and energy use in California has increased to a point where energy utilities are being directed by the California Public Utilities Commission (CPUC) to form partnerships with water agencies to reduce embedded energy use through water efficiency programs. The water efficiency programs reduce the amount of water that is pumped throughout the state, and therefore reduce the amount of energy used for that pumping. Water efficiency programs also reduce the amount of hot water used for activities such as washing a load of laundry, thereby reducing energy use.

For many water agencies, partnerships with their local energy utility did not exist until recently. That is not the case for the Water Authority. For more than 20 years, the Water Authority and SDG&E have partnered on a variety of programs and projects that have generated significant water and embedded energy savings. Highlights from the Water Authority and SDG&E partnership include:
• **Showerhead Distributions** - Implemented in the early 1990s in response to severe drought conditions, the low-flow showerhead distribution program distributed more than 500,000 low-flow showerheads that save water and embedded energy. The Water Authority, its member agencies, and SDG&E distributed the showerheads through various methods, including mass distributions during community events and as part of home water use surveys.

• **Pre-Rinse Spray Valve Installations** – The Water Authority and SDG&E partnered to install pre-rinse spray valves in more than 300 restaurants in the mid-2000s. The spray valves are self-closing to reduce the amount of hot water wasted. The Water Authority facilitated a financial incentive that provided the pre-rinse spray valves at no cost, and SDG&E performed the installations.

• **High-Efficiency Clothes Washers** – Since 1994, SDG&E has contributed more than $3.8 million in supplemental funding to increase the financial incentive available to Water Authority customers for the purchase and installation of more than 100,000 residential high-efficiency clothes washers and more than 9,100 commercial high-efficiency clothes washers. SDG&E also provided marketing funding to increase program participation through outreach to the region’s retail distributors of high-efficiency clothes washers. In an effort to increase the number of high-efficiency clothes washers installed in the region, the Water Authority also facilitated the ability of SDG&E to apply for SoCal WaterSmart rebates (offered through the Metropolitan Water District of Southern California) for high-efficiency clothes washers installed through its Energy Savings Assistance Program.

• **Water-Energy Pilot Program** – From 2008 to 2010, the Water Authority partnered with SDG&E in a California Public Utilities Commission-managed pilot program to study embedded energy use in the water sector. SDG&E contributed $996,000 and the Water Authority contributed $275,000 to the pilot program’s budget. The pilot program evaluated embedded energy use in four different programs. First, the pilot program offered high-water-use commercial customers a comprehensive water/energy audit and evaluated the potential for saving water and related embedded energy. Second, the pilot program implemented a managed landscape program that documented and verified the water savings and related energy savings. Third, the pilot program retrofitted sites that allowed customers to convert from potable water sources to lower energy recycled water sources and evaluated the embedded energy savings. And finally, the pilot program retrofitted a detention facility with water-efficient hardware and measured the water and embedded energy savings. All of the pilot programs showed significant water and embedded energy savings.

• **Energy Efficiency Assessments for Water Agencies** – Beginning in 2010 and continuing through 2012, the Water Authority partnered with SDG&E to offer no-cost energy efficiency assessments to the Water Authority and its member agencies. The value of the services provided by SDG&E’s third-party contractor was $300,000. There was no cost to the Water Authority. Assessments were performed on 103 water agency facilities that provide water treatment, delivery, disposal, and reuse services. As a result of the assessments, recommendations to improve energy efficiency were made in the areas of
operations, maintenance, and capital improvements, as well as recommendations on what rate structure would most benefit each water agency based on their individual operations. The assessments also included a cost-benefit analysis for the recommendations and information on any available incentives that could be applied if the recommendations were implemented.

- **Home Energy and Water Savings Kits Distribution** – SDG&E currently provides at no cost to the Water Authority and its member agencies energy and water savings kits that include a showerhead and aerators. The Water Authority and its member agencies distribute the kits at events and to customers who participate in home water use surveys. The water agencies benefit through improved water efficiency and SDG&E benefits through embedded energy savings.

- **Marketing** – The Water Authority and SDG&E cross-market each other’s water and energy efficiency programs. This is achieved by including program messaging on websites and through the distribution of program marketing materials at events. The Water Authority’s water efficiency programs are also highlighted on the information kiosk at SDG&E’s Energy Innovation Center.

**Discussion**

The majority of the aforementioned partnerships were made possible through executing formal agreements with SDG&E that defined the parties’ respective responsibilities and contributions for a specific time period. Informal partnership activities, such as the marketing partnership, do not require a formal agreement. For partnership activities proposed for the next two years, execution of a formal agreement between the Water Authority and SDG&E is required. The agreement would allow implementation of the following three new water and energy efficiency programs:

- **WaterSmart Landscape Efficiency Program** - The program would target a 20 percent reduction in water use at sites with multiple acres of irrigated landscape. The program would achieve a portion of the water savings through a pre-implementation audit of the site’s irrigation system to identify and fix any malfunctioning and broken irrigation components, and a portion of the water savings through services provided by a water management service company that would adjust the site’s irrigation schedule to match the site’s irrigation demand. The program will be modeled after the Water Authority’s successful pilot program that realized an average savings of 35 percent per site.

- **Leak Loss Detection Program** - The program will save water and embedded energy through top-down water audits of retail water agency distribution systems. The water audits will be available at no cost to the Water Authority’s member agencies. The top-down water audits will be performed by a third-party contactor and will balance the total volume of water entering a retail water system against authorized consumption and water losses. The program will also identify opportunities for the Water Authority’s member agencies to implement pressure management measures to reduce or eliminate water loss due to leaks.
- *Detention Facility Retrofits Program* – The program at the Vista Detention Facility will save water and embedded energy through the installation of water-efficient devices, including electronic flush valves, low-flow showerheads, and aerators. The program will be modeled after a successful pilot program at the Bailey Detention Facility that reduced water use by more than 300 acre-feet per year. SDG&E and the Water Authority will work with the contractor to identify additional opportunities to achieve water and embedded energy savings at the facility. The County of San Diego will also provide financial and in-kind services to support the program.

Upon completion of the three programs, SDG&E will work with the CPUC to develop a comprehensive evaluation, measurement, and verification plan to determine water and energy savings.

Prepared by: Jeff Stephenson, Principal Water Resources Specialist  
Reviewed by: Jason Foster, Director of Public Outreach and Conservation  
Approved by: Dennis A. Cushman, Assistant General Manager
January 16, 2013

Attention: Legislation, Conservation and Outreach Committee

Online Residential Water Use Calculator (Information)

Purpose
To preview an online residential water use calculator the Water Authority is developing to educate and assist customers in their efforts to become more water-efficient.

Background
In November 2010, the Water Authority conducted a workshop with member agency managers and conservation staff to prioritize Water Authority water conservation program activities that would be of the greatest benefit to the region and to the member agencies. As a result of the workshop, five “core” types of activities were identified by a majority of member agency managers: residential surveys, K-12 educational programs, landscape audits, maximizing the use of MWD device-based incentive programs, and the development of “how to” resource tools for member agencies and the region’s water users that would make it easier for customers to improve their water efficiency.

Following the establishment of these priorities, Water Authority staff evaluated the potential development of several resource tools to help advance regional water use efficiency. One identified area of need was to make information provided by residential water use surveys available to a wider audience in a convenient way. To address this need, the Water Authority began the planning and development of an online regional water use calculator. The goal of the calculator is to provide the Water Authority and its member agencies with a tool that its residential customers can easily use 24 hours a day, seven days a week to assess their indoor and outdoor water use and identify opportunities to save water.

Previous Board Actions:

In July 2007, the Board formally adopted the “Blueprint for Water Conservation,” developed with input from member agencies and private sector stakeholders, as the Water Authority’s water use efficiency strategic plan for the next five years.

In July 2010, the Board directed staff to evaluate the Blueprint’s strategies and recommend new or modified strategies to reflect changed conditions from when the Blueprint was adopted in 2007.

In December 2010, the Board directed staff to focus on five activities designated as “core” by a majority of member agency managers: residential surveys, K-12 educational programs, landscape audits, maximizing the use of MWD device-based incentive programs, and the development of resource tools for member agencies and the region’s water users. The Board also directed staff to continue the programs and projects that were contractually obligated through grants, MOUs, or other agreements.
In April 2012, the Water Authority Board approved Water Use Efficiency Policy Principles to provide staff with long-term strategic direction for planning and implementing regional water use efficiency initiatives and programs.

Discussion

The objective of the water use calculator is to educate homeowners about their water use and inspire them to make changes in their behavior, fixtures or landscape that will make their home more water efficient. This resource will help member agencies cost-effectively meet SBX 7-7 mandates and promote overall water use efficiency.

To help develop the calculator, the Water Authority secured a $10,000 grant from the Hans and Margaret Doe Charitable Trust. To help minimize development costs, the Water Authority also sought to partner with an organization that had developed a similar tool that could be modified to meet the needs of the San Diego region.

In January 2012, The Alliance for Water Efficiency (AWE), a non-profit organization that serves as a North American advocate for water efficient products and programs, launched a user-friendly online water use calculator in partnership with The Field Museum of Chicago. In May 2012, the Water Authority, a charter sponsor of AWE, signed an agreement with AWE to customize its existing water use calculator to include weather-related data and other information specific to the San Diego region. The total budget to produce the calculator is $20,000.

The water use calculator will provide customers with several types of valuable information, including:

- An estimate of the home’s daily and annual indoor and outdoor water use based on data entered by the customer;
- A comparison of the customer’s estimated water use versus that of an average home and a water-efficient home within the same region and with the same number of residents;
- An estimate of the home’s carbon footprint from hot water use within the home;
- A list of suggestions and ideas for improving the home’s water efficiency;
- Graphs and charts that explain the home’s water use.

The Water Authority is testing the water use calculator and anticipates making it available to the public in early 2013. The public will be able to access the calculator through the Water Authority’s website, or via links from member agency websites. The Water Authority will also encourage other organizations to establish links to the calculator to increase public awareness and use.

Prepared by: Michele Shumate, Water Resource Specialist
Reviewed by: Jason Foster, Director of Public Outreach and Conservation
January 16, 2013

Attention: Legislation, Conservation and Outreach Committee

Government Relations Update (Information)

Discussion
This report is an update of the Water Authority’s government relations program.

The Legislature
The Legislature returned to the Capitol on January 7. As a result of the November 2012 election, Democrats will control a two-thirds majority in both houses. However, some state Senators have been elected to Congress, and some Assembly members are running for their now-vacant Senate seats in special elections. This will create temporary vacancies in the Senate and Assembly, which will keep the two-thirds majority from being entirely effective until late in the 2013 legislative session. Also, the Assembly has 39 new members, almost half of the 80 member house.

Budget
The Governor released his budget on January 10. The Governor’s Budget restores funding to schools from Proposition 30 revenues, and pays down debts incurred over the past few years of chronic budget deficits. The legislative budget is now adopted by a simple majority vote, so the final state budget is expected to be adopted by the June 30 deadline this year.

Water Bond
The water bond measure that was enacted in 2009 was postponed to the 2012 general election and then to the 2014 general election. The water bond would provide a total of $11.14 billion for water projects throughout the state, and for environmental projects to accompany water projects. The water bond includes $2.5 billion to pay for the public (environmental) benefits from the Bay-Delta Conservation Plan, and $3 billion for the public benefits associated with one or more reservoirs upstream of the Delta in the Sacramento River and San Joaquin River watersheds. The water bond also includes $100 million for the Water Authority to pay for construction of water supply reliability projects in the San Diego region.

A number of legislators have already introduced bond measures stating the intent of the Legislature to enact a new water bond. Some legislators and the Governor believe that the 2009 bond measure is too large for the voters to pass, and that it contains too many earmarked funds for the districts of various legislators. They are seeking a bond that is more in the range of $5 billion to $6 billion.

Passing a bond measure requires a two-thirds majority of the Legislature. Changing the date of a bond measure that has already passed also requires a two-thirds majority. The current water bond is scheduled for the 2014 general election. Replacing the current water bond with another bond measure, or changing the current bond measure will require a two-thirds majority vote of the Legislature. The current water bond passed in 2009 by a bare two-thirds majority without a vote
to spare in either house. Although only a few legislators who voted for the water bond in 2009 are still in the Legislature, the new legislators may be expected to protect their districts’ interests. Obtaining the two-thirds majority vote necessary to both pass a new bond and to repeal the current bond may be difficult. In the meantime, the water bond enacted in 2009 remains on the 2014 ballot until it is amended, repealed, or postponed.

**Bay-Delta**
A final draft Delta Plan was released in November by the Delta Stewardship Council. This draft builds on the six staff drafts that were released in 2011 and 2012. The Water Authority commented on the Sixth Staff Draft in 2012 and also on the final draft Delta Plan on January 11, 2013.

The Bay-Delta Conservation Plan has slipped behind schedule. The state Natural Resources Agency and the state and federal water contractors are still negotiating with the federal fisheries agencies on a plan that could be permitted under the federal Endangered Species Act. As a result, the release of drafts the Conservation Plan and associated environment impact report/environmental impact statement (EIR/EIS) for public comment have been delayed from the fall of 2012 to some indefinite time in the spring of 2013.

**Lobbyist Activities**
Jonathan Clay of Carpi and Clay will provide a separate report of the firm’s monthly activities.

Bob Giroux of Lang, Hansen, O’Malley & Miller reports that he performed the following lobbying activities on behalf of the Water Authority in November and December:

- Provided strategic advice and information regarding the Water Authority’s legislative interests.
- Conferred with the Assembly Speaker and the Senate President pro tem regarding the Water Authority’s interests.

John White’s activities in November and December included:

- Provided strategic advice and information regarding the Water Authority’s legislative interests.

**Washington, D.C.**
Following the November 2012 election, Congress reconvened in a “lame duck” session to deal with the so-called “fiscal cliff.” On December 31, tax cuts enacted during the Bush administration were scheduled to expire and cuts in federal spending in the amount of $1.2 billion were scheduled to begin. Congress finally passed a bill at midnight on January 1, 2013, extending the Bush tax cuts for most taxpayers and postponing for two months the cuts in federal spending.

Another major crisis is looming at the Capitol as the nation has hit the “debt ceiling.” This is a limit created by Congress on the amount of debt the nation may incur. The debt ceiling has to be
periodically raised as the nation accumulates debt from continuing budget deficits and other obligations. Without raising the debt ceiling, the government may not be able to meet all of its obligations in the coming year.

Ken Carpi of Carpi & Clay will provide a separate report of the firm’s monthly activities in Washington, D.C.

Prepared by: Jeffrey A. Volberg, Government Relations Manager
Reviewed by: Dennis A. Cushman, Assistant General Manager

2. Additions to agenda (Government Code Section 54954.2(b)).

3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

4. Chair’s report.
   4-A Directors’ comments.

I. CONSENT CALENDAR

1. Professional services contract with LEE & RO, Inc. for design of the Miramar Pump Station Rehabilitation project.
   Staff recommendation: Authorize the General Manager to award a professional services contract in the amount of $489,832 to LEE & RO, Inc. for the design of the Miramar Pump Station Rehabilitation project. (Action)

Nicola Kavanagh
II. ACTION/DISCUSSION

1. Project Delivery Work Group Recommendations.  
   Work Group Recommendation:  
   - During the last half of 2013, provide the E&O Committee a presentation on the Gate Process and how it guides a capital project through the various project phases.  
   - Use the Nob Hill project as an example of how the Gate Process works. Provide Gate information at the time of each Board action on the project, and provide information presentations at key gates that don’t require Board action.  
   - Provide the Board information regarding past project performance (e.g. change orders)  
   (Action)  
   Frank Belock

2. Change Orders to Shimmick/Obayashi Joint Venture for the San Vicente Dam Raise Package 3 – Roller Compacted Concrete Dams and Appurtenant Facilities project.  
   Staff recommendation: Accept Shimmick/Obayashi Joint Venture Change Orders 28, 29 and 32 through 36 for a credit of $65,688; and authorize the General Manager to execute a change order for up to $500,000 for interim storm water conveyance improvements, increasing the authorized contract amount from $140,681,794.70 to $141,116,106.70.  
   (Action)  
   Jerry Reed

   Staff recommendation: Authorize the General Manager to approve the Design-Build performance specification for the San Marcos Vent Desalination Modifications project.  
   (Action)  
   Jeremy Crutchfield

   Staff recommendation: Authorize the General Manager to send the U.S. Army Corps of Engineers comments regarding the Draft Environmental Impact Statement for the Gregory Canyon Landfill.  
   (Action)  
   Larry Purcell

III. INFORMATION

IV. CLOSED SESSION
V. ADJOURNMENT

NOTE: This meeting is called as an Engineering & Operations Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.

Doria F. Lore
Clerk of the Board
January 16, 2013

Attention: Engineering and Operations Committee

Professional services contract with LEE & RO, Inc. for design of the Miramar Pump Station Rehabilitation project. (Action)

**Staff recommendation**
Authorize the General Manager to award a professional services contract in the amount of $489,832 to LEE & RO, Inc. for design of the Miramar Pump Station Rehabilitation project.

**Alternative**
Do not award the contract and direct staff to negotiate with another firm, or solicit new proposals. This will result in additional staff costs and potential project delays.

**Fiscal Impact**
Funds in the amount of $150,000 are available in the fiscal years 2012 and 2013 Capital Improvement Program appropriation. The remaining $339,832 will be requested with the fiscal years 2014 and 2015 Capital Improvement Program appropriation. The rate category for this project is customer service.

**Background**
The Miramar Pump Station was placed into operation in 1979 and is part of the Water Authority’s existing water conveyance system. The primary purpose of the pump station is to deliver up to 85 cfs of emergency water supplies to member agencies after an emergency storage event, such as an earthquake. Due to its age, much of the pump station’s equipment is either obsolete or no longer supported by the original manufacturers. A condition assessment, conducted in March 2012, found the building functional but in need of structural repairs; the pumps, piping, and valves in need of rehabilitation or replacement; and the electrical system in need of replacement. The Miramar Pump Station Rehabilitation project will improve operations and reliability and ensure the pump station remains fully operational after an emergency storage event.

**Discussion**
The scope of work for this contract is to provide design and design support services during the bidding and construction of the project. The project design elements include structural rehabilitation of the building; rehabilitation or replacement of the pumps, motors, and valves; and replacement of the electrical system.

On October 15, 2012 a Request for Proposals open to all consultants was advertised to provide design services for the project. Four firms submitted proposals: GEI Consultants, CivilSource, Carollo Engineers, and LEE & RO, Inc.
All four firms were interviewed by a panel of Water Authority staff on November 27, 2012. The selection criteria required firms to demonstrate their understanding of the scope of work, technical and specialized qualifications of the design team, past performance on similar projects, and the firm’s ability to meet the schedule. Based on staff evaluation of the written proposals, oral interviews, and reference checks, LEE & RO, Inc. was selected as the most qualified firm to perform this work.

Upon Board approval, the design services contract will be executed for a not-to-exceed amount of $489,832 to design the Miramar Pump Station Rehabilitation project and provide design support services during bidding and construction phases. The project is expected to advertise for construction bids in mid-2014.

LEE & RO, Inc. is a certified small and minority-owned business. The small business participation for this contract is 100 percent. The minority- and woman-owned business participation is 89 percent. This information is provided for statistical purposes.

Prepared by: Nicola Kavanagh, Senior Engineer
Reviewed by: William J. Rose, Director of Engineering
Approved by: Frank Belock, Jr., Deputy General Manager

Attachment: Figure 1 – General Location Map
EXISTING WATER AUTHORITY MIRAMAR PUMP STATION
January 16, 2013

Attention: Engineering and Operations Committee

Project Delivery Work Group Recommendations (Action)

Work Group Recommendation:
- During the last half of 2013, provide the E&O Committee a presentation on the Gate Process and how it guides a capital project through the various project phases.
- Use the Nob Hill project as an example of how the Gate Process works. Provide Gate information at the time of each Board action on the project, and provide information presentations at key gates that don’t require Board action.
- Provide the Board information regarding past project performance (e.g. change orders)

Alternative
Direct the Work Group to conduct additional investigations into alternative methods to deliver capital projects.

Fiscal impact
There is no fiscal impact.

Discussion
The Project Delivery Work Group (Work Group) was formed in September 2012 to: 1) review how the Water Authority designs and constructs its projects, 2) review alternative project delivery methods, and 3) make recommendations to the Board on changes to current practices and policies as appropriate. The vast majority of the Water Authority’s Capital Improvement Program projects are constructed using the Design-Bid-Build method, however there are several other methods being used by public agencies throughout the country which address a variety of design, cost, and schedule issues.

The Work Group is comprised of the following Board members: Bud Pocklington (Chair), David Barnum, Marty Miller, Vincent Mudd, Hershell Price, Javier Saunders, and Mark Weston. Former Board member Bill Knutson chaired the Work Group until his resignation from the Board in early January 2013.

The Work Group met three times and reviewed the following information:
- Current policies and practices that guide the process to plan, design, and construct a Water Authority Capital Improvement Program project
- Advantages and disadvantages of ten different project delivery methods including:
  - design-bid-build (vast majority of Water Authority projects)
  - design-build (three Water Authority projects)
  - design-build-operate (one Water Authority project)
• Construction manager at risk
  • Potential impact of economic conditions and project labor agreements on project delivery
  • Water Authority’s change order history and the ratio of construction and non-construction costs within a project
  • Specific issues regarding contractor unit pricing, inspection services, and how liquidated damages are calculated and assessed
  • Staff’s Gate Process and the ways it addresses the issues noted above

The Gate Process is a staff procedure that ensures all critical project components are completed as the project moves through the planning, design, construction, and post construction phases. This process ensures that a phase of a project (i.e., a gate) does not begin until an internal multi-departmental staff committee agrees that all of the requirements for the previous gate are satisfied. There are eight gates, beginning with project initiation and ending with project closeout. One of the critical decisions made during the Gate Process is which project delivery method is used. The Work Group reviewed ten different project delivery methods, what delivery methods the Water Authority and other public agencies in the San Diego region currently employ, and the Water Authority’s experience with key performance indicators such as change order history.

The Work Group was generally pleased with staff’s procedures used to select a project delivery method and in particular how the Gate Process is used to bring projects on line. The Work Group recommends:

  • During the last half of 2013, staff will provide the E&O Committee a presentation on the Gate Process and how it guides a capital project through the various project phases.
  • Use the Nob Hill project as an example of how the Gate Process works. Provide Gate information at the time of each Board action on the project, and information presentations at gates that don’t require Board action.
  • Provide the Board information regarding past project performance (e.g. change orders)

Prepared by: William J. Rose, Director of Engineering
Reviewed by: Director Bud Pocklington
Reviewed and Approved by: Frank Belock, Deputy General Manager
San Diego County Water Authority

January 16, 2013

Attention: Engineering and Operations Committee

Change Orders to Shimmick/Obayashi Joint Venture for the San Vicente Dam Raise Package 3 – Roller Compacted Concrete Dams and Appurtenant Facilities project. (Action)

Staff recommendation
Accept Shimmick/Obayashi Joint Venture Change Orders 28, 29 and 32 through 36 for a credit of $65,688; and authorize the General Manager to execute a change order for up to $500,000 for interim storm water conveyance improvements, increasing the authorized contract amount from $140,681,794.70 to $141,116,106.70.

Alternative
Do not accept these change orders and provide direction to staff relative to issues requiring resolution.

Fiscal impact
There are sufficient funds in the approved project budget and in the fiscal years 2012 and 2013 Capital Improvement Program appropriation to support this action. The rate category for this project is storage.

Background
The completed San Vicente Dam Raise of 117 feet, provides an additional 152,000 acre-feet of combined emergency and carryover storage for the region, per the April 2008 Board certified Carryover Storage Project Environmental Impact Report.

The Dam Raise project is being implemented through seven construction packages to expedite the construction schedule, as well as to promote opportunities for small businesses. The following is the project’s implementation plan status:

- Package 1 - Test Quarry (completed by Sukut Construction, Inc.)
- Package 2 - Foundation Preparatory Work (completed by Barnard Construction Company, Inc.)
- Package 2B - Vegetation Cutting and Erosion Control (completed by Valley Crest Landscape Development)
- Package 3 - Roller Compacted Concrete Dams and Appurtenant Facilities (in construction, Shimmick/Obayashi Joint Venture)
- Package 4 - Bypass Pipeline (in design)
- Package 5 - Marina Improvements (in design)
- Package 6 - Post Construction Habitat Restoration (in planning)

The Package 3 scope of work includes raising the main dam, constructing a smaller saddle dam, building a new outlet tower, pipelines, access roads, and a control facility to regulate the flow of
water from the expanded reservoir to Water Authority and City of San Diego facilities. The limits of work for Package 3 are shown in Figure 1.

Shimmick/Obayashi is the Package 3 contractor currently finishing construction on the main dam and constructing the outlet works. This includes the piping and concrete structures for the outlet tower and the downstream control facility.

Previous Board Actions: In July 2012, the Board accepted Shimmick/Obayashi Joint Venture Change Orders 19 through 22, 24 and 25 for a credit of $156,139; and authorized the General Manager to reduce the contract value by $2,946,000 for roller compacted concrete and marina quarry unit price items, decreasing the authorized contract amount from $143,783,933.70 to $140,681,794.70.

Discussion
Staff recommends that the Board accept Shimmick/Obayashi Joint Venture Change Orders 28, 29 and 32 through 36 executed by staff under the General Manager’s authority, for a credit of $65,688. These items are summarized below and include differing site conditions, design modifications including outside agency requirements, and administrative contract revisions. A full listing of contract modifications is attached in Table 1.

  Differing Site Conditions: Staff executed one differing site condition modification for $18,993 to remove unexpected soft and broken rock conditions on the upstream side of the dam to provide an acceptable foundation for the placement of a concrete support structure. This structure is needed for the installation of the Carpi waterproof lining system on the upstream face of the dam.

  Design Modifications: Staff executed 10 design modifications in the amount of $180,184. The major items were additional corrosion protection for in-line chemical diffusers, an increase unit price quantity for foundation cleaning, and leveling concrete for the base of the low-level outlet pipeline encasement.

  Administrative: Staff executed four modifications for a credit of $264,865. The administrative items included contractor reimbursements for site water and power usage for credits of $145,599 and $119,266 respectively, and a no-cost time extension for additional RCC aggregate excavation.

We are also requesting the Board authorize the General Manager to execute a change order for up to $500,000 for interim stormwater conveyance improvements required to address the new reservoir fill schedule. After the award of Package 3 construction contract in 2010, the reservoir fill schedule was revised (in 2011) in response to the deferral of the San Vicente Bypass Pipeline (Package 4). Package 4 will relocate the City’s Bypass Pipeline so that it is above the new high water level of the expanded reservoir. A condition of this project deferral was that the Water Authority not inundate the City’s existing bypass pipeline until the new one is constructed and operational, which is anticipated in Summer of 2015. Therefore, the reservoir will not be filled above the elevation of 650 feet until that time. The interim stormwater conveyance system
improvements include soil stabilization, a system of pipelines, open channels, and retention basins required to carry the stormwater flows from the discharge locations at the new Marina and high water level associated with the dam raise to the lower water surface elevation. See Figure 2. These measures are necessary to comply with Regional Water Quality Control Board permit requirements until the reservoir is filled to the full height of the Dam Raise. These improvements were not anticipated at the time of the deferral of construction of the San Vicente By-Pass Pipeline.

Approval of this recommendation will increase the Shimmick/Obayashi authorized contract total by $434,312 from $140,681,794.70 to $141,116,106.70 which brings the total change order percentage for Package 3 to 0.6 percent.

On this project, the small business participation is 11 percent. Minority and women-owned business participation for this project is 0.6 percent. This information is provided for statistical purposes.

Prepared by: J. Wade Griffis, Lead Construction Administrator
Reviewed by: William J. Rose, Director of Engineering
Approved by: Frank Belock, Jr., Deputy General Manager

Attachments: Figure 1 – General Location Map
Figure 2 – Marina Area Interim SWPPP Improvements
Table 1 – Summary of Construction Change Orders
Installed Marina Storm Drain Discharge Points

Interim Storm Water Conveyance System and Sediment Basins
<table>
<thead>
<tr>
<th>Change Order</th>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Milestone Time Extension</th>
<th>Contract Time Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Design Modification - Revise rock bolt bearing plate dimensions</td>
<td>$8,756</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>Administrative Modification - Credit for deletion of copy machines.</td>
<td>($38,495)</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Administrative Modification - Extend Milestone 2 and Milestone 3 for inclement weather.</td>
<td>$0</td>
<td>9 days to M2</td>
<td>10 days to M3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Design Modification - Provide Gallery Access Building foundation leveling concrete.</td>
<td>$40,500</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Differing Site Condition - Revise marina access road overexcavation unit price quantity.</td>
<td>$21,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>Differing Site Condition - Revise foundation excavation unit price quantity.</td>
<td>$128,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Design Modification - Provide verification hole for grout trial.</td>
<td>$258</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>Design Modification - Perform additional verification hole drilling and testing.</td>
<td>$39,830</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Administrative Modification - Revise prequalification requirements for welding procedure.</td>
<td>($2,666)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>3</td>
<td>4</td>
<td>Design Modification - Place foundation leveling concrete for upper level of Downstream Control Facility.</td>
<td>$73,125</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Differing Site Condition - Remove unsuitable material on marina access road.</td>
<td>$16,621</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>Design Modification - Reduce quantity for drill set up over curtain, stitch or consolidation (between stations 9+00 and 12+00) grout holes in raised and saddle dams foundation excavation- (bid item no. 29).</td>
<td>($8,700)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>3</td>
<td>7</td>
<td>Design Modification - Reduce quantity for drilling rotary or percussion holes in rock- raised and saddle dams foundation excavation - (bid item no. 37).</td>
<td>($65,000)</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Design Modification - Increase quantity for drill set up over grout holes on dam crest and encasements - (bid item no. 28).</td>
<td>$12,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>Design Modification - Increase quantity for rock coring, NW-NQ size, from raised and saddle dam foundation excavation- (bid item no. 34).</td>
<td>$155,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
</tbody>
</table>

Change Orders 1-4 approved at February 24, 2011 Board Meeting
Total change order amount through Change Order 4: $380,229
Total time extension: 10 days
Original Board authorized contract amount: $140,206,050.00
New executed contract amount: $140,586,279.00

M = Milestone
<table>
<thead>
<tr>
<th>Change Order</th>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Milestone Time Extension</th>
<th>Contract Time Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>Design Modification - Cost Impacts for Missing Footpath on Left Abutment.</td>
<td>$65,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>Administrative Modification - Extend Milestone 2 and Milestone 3 for inclement weather.</td>
<td>$0</td>
<td>1 day to M2</td>
<td>1 day</td>
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<tr>
<td>6</td>
<td>1</td>
<td>Administrative Modification - Credit for reduction of on-site laboratory technician services.</td>
<td>($150,000)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>6</td>
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<td>Design Modification - Revise grout mix for foundation grouting.</td>
<td>$115,000</td>
<td>0 days</td>
<td>0 days</td>
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<td>6</td>
<td>3</td>
<td>Administrative Modification - Extend Milestone 2 and Milestone 3 for inclement weather.</td>
<td>$0</td>
<td>4 days to M2</td>
<td>2 days</td>
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<tr>
<td>6</td>
<td>4</td>
<td>Administrative Modification - Revise description of site maintenance allowance to include other site maintenance deemed necessary by the Engineer.</td>
<td>$0</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>Differing Site Condition - Credit for deletion of concrete demolition in the valve house.</td>
<td>($5,000)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>6</td>
<td>6</td>
<td>Differing Site Condition - Provide additional raised dam excavation at the outlet tower.</td>
<td>$3,855</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>Outside Agency Requirement - Provide telephone conduit modifications on the Marina Access Road.</td>
<td>$16,867</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>7</td>
<td>1</td>
<td>Design Modification - Increase quantity for drill set up over grout holes on dam crest or encasements - (bid item no. 28).</td>
<td>$6,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Design Modification - Increase quantity for concrete or rock coring, NW-NQ size, from foundation gallery - (bid item no. 33).</td>
<td>$280,410</td>
<td>0 days</td>
<td>0 days</td>
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<td>8</td>
<td>2</td>
<td>Design Modification - Decrease quantity for drilling rotary or percussion holes in concrete or rock from foundation gallery or upper outlet tunnel - (bid item no. 36).</td>
<td>($195,927.50)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>8</td>
<td>3</td>
<td>Design Modification - Increase quantity for dental concrete - (bid item no. 46).</td>
<td>$57,000</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>9</td>
<td>1</td>
<td>Administrative Modification - In-plant source inspection credit.</td>
<td>($183,064)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>9</td>
<td>2</td>
<td>Administrative Modification - Extend Milestone 2 and Milestone 3 for inclement weather.</td>
<td>$0</td>
<td>1 day to M2</td>
<td>3 days</td>
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<tr>
<td>10</td>
<td>1</td>
<td>Differing Site Condition - Increase quantity for Installation of Tensioned cut slope rock bolts - (bid item no. 59).</td>
<td>$111,343.20</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>Differing Site Condition - Increase quantity for drill set up over curtain, stitch or consolidation grout holes in raised and saddle dam foundation excavation - (bid item no. 29).</td>
<td>$18,850</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>11</td>
<td>1</td>
<td>Design Modification - Credit for deletion of concrete encasement at the Interconnect Pipeline</td>
<td>($1,200)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>11</td>
<td>2</td>
<td>Differing Site Condition - Provide additional grout quantities on rock bolt installation at outlet tower excavation.</td>
<td>$4,491</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>11</td>
<td>3</td>
<td>Outside Agency Requirement - RCC trial placement modifications.</td>
<td>$122,653</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>11</td>
<td>4</td>
<td>Design Modification - Increase quantity for drilling rotary or percussion holes in rock – raised and saddle dam foundation excavation (bid item no. 37).</td>
<td>$117,000</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>12</td>
<td>1</td>
<td>Differing Site Condition - Decrease quantity for processing, mixing and injecting grout (bid item no. 41).</td>
<td>($305,250)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>12</td>
<td>2</td>
<td>Design Modification - Re-drilling grout from holes (bid item no. 38).</td>
<td>$19,500</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>13</td>
<td>1</td>
<td>Differing Site Condition - Increase quantity for Shotcrete (bid item no. 64).</td>
<td>$200,000</td>
<td>0 days</td>
<td>0 days</td>
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</tbody>
</table>
Change Orders 5-13 approved at August 25, 2011 Board Meeting

<table>
<thead>
<tr>
<th>Change Order</th>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Milestone Time Extension</th>
<th>Contract Time Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>1</td>
<td>Differing Site Condition - Grout Waterline in Existing Dam Gallery</td>
<td>$5,851</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>Outside Agency Requirement - Revised Foundation Preparation Requirements for Raised Dam Foundation Shaping Concrete</td>
<td>$87,563</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>Differing Site Condition - Provide Marina Access Road Brow Ditch Modifications</td>
<td>$9,675</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>Outside Agency Requirement - Provide Additional RCC Trial Placement Cores</td>
<td>$4,547</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>Administrative Modification - Extend Contract Milestone Completion Dates Due to Uncontrollable Circumstance</td>
<td>$0</td>
<td>1 day to M2</td>
<td>0 days</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>Outside Agency Requirement - Moreno Avenue/Vigilante Road Intersection Modifications</td>
<td>$29,962</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>23</td>
<td>1</td>
<td>Design Modification - Place Foundation Leveling Concrete for Lower Level of Downstream Control Facility</td>
<td>$111,099</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>23</td>
<td>2</td>
<td>Design Modification - Place Foundation Leveling Concrete for 108-inch LLO Pipe at Downstream</td>
<td>$29,389</td>
<td>0 days</td>
<td>0 days</td>
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</table>

Change Orders 14-16 and 23 approved at August 25, 2011 Board Meeting

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Milestone Time Extension</th>
<th>Contract Time Extension</th>
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</thead>
<tbody>
<tr>
<td>Differing Site Condition - Grout Waterline in Existing Dam Gallery</td>
<td>$5,851</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Outside Agency Requirement - Revised Foundation Preparation Requirements for Raised Dam Foundation Shaping concrete</td>
<td>$87,563</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Differing Site Condition - Provide Marina Access Road Brow Ditch Modifications</td>
<td>$9,675</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
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<td>$4,547</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Administrative Modification - Extend Contract Milestone Completion Dates Due to Uncontrollable Circumstance</td>
<td>$0</td>
<td>1 day to M2</td>
<td>0 days</td>
</tr>
<tr>
<td>Outside Agency Requirement - Moreno Avenue/Vigilante Road Intersection Modifications</td>
<td>$29,962</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Design Modification - Place Foundation Leveling Concrete for Lower Level of Downstream Control Facility</td>
<td>$111,099</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Design Modification - Place Foundation Leveling Concrete for 108-inch LLO Pipe at Downstream</td>
<td>$29,389</td>
<td>0 days</td>
<td>0 days</td>
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</tbody>
</table>

Total change order amount through Change Order 13: $297,527.70
Total time extension: 16 days
Original Board authorized contract amount: $140,206,050.00
New executed contract amount: $140,883,806.70

Change Orders 17 and 18, 30 and 31 approved at December 8, 2011 Board Meeting

<table>
<thead>
<tr>
<th>Change Order</th>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Milestone Time Extension</th>
<th>Contract Time Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>1</td>
<td>Design Modification - Modify Minimum Time Elapsing Between Placing of Successive Lifts on Concrete for Outlet Pipe Encasement</td>
<td>$0</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>Design Modification - Delete Standby Generator Platform</td>
<td>($4,904)</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>Outside Agency Requirement - Provide Additional Foundation Preparation at Main Dam</td>
<td>$99,314</td>
<td>5 days to M2 5 days to M3</td>
<td>3 days</td>
</tr>
<tr>
<td>17</td>
<td>4</td>
<td>Outside Agency Requirement - Provide RCC Batching for SE Testing</td>
<td>$9,717</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>17</td>
<td>5</td>
<td>Administrative Modification - Extend Milestone 2 and Milestone 3 for inclement weather.</td>
<td>$0</td>
<td>4 days to M2 4 days to M3</td>
<td>4 days</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>Differing Site Condition - Increase Quantity for Shotcrete (Bid Item No. 64)</td>
<td>$220,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>30</td>
<td>1</td>
<td>Outside Agency Requirement - Furnish and Install Straw Wattles per Revised Construction General Permit Regulatory Requirements</td>
<td>$388,016</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>31</td>
<td>1</td>
<td>Outside Agency Requirement - Furnish and Install Straw Wattles in Designated Disturbed Areas</td>
<td>$295,075</td>
<td>0 days</td>
<td>0 days</td>
</tr>
</tbody>
</table>

Change Orders 17 and 18, 30 and 31 approved at December 8, 2011 Board Meeting

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Milestone Time Extension</th>
<th>Contract Time Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Modification - Modify Minimum Time Elapsing Between Placing of Successive Lifts on Concrete for Outlet Pipe Encasement</td>
<td>$0</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Design Modification - Delete Standby Generator Platform</td>
<td>($4,904)</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Outside Agency Requirement - Provide Additional Foundation Preparation at Main Dam</td>
<td>$99,314</td>
<td>5 days to M2 5 days to M3</td>
<td>3 days</td>
</tr>
<tr>
<td>Outside Agency Requirement - Provide RCC Batching for SE Testing</td>
<td>$9,717</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Administrative Modification - Extend Milestone 2 and Milestone 3 for inclement weather.</td>
<td>$0</td>
<td>4 days to M2 4 days to M3</td>
<td>4 days</td>
</tr>
<tr>
<td>Differing Site Condition - Increase Quantity for Shotcrete (Bid Item No. 64)</td>
<td>$220,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Outside Agency Requirement - Furnish and Install Straw Wattles per Revised Construction General Permit Regulatory Requirements</td>
<td>$388,016</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Outside Agency Requirement - Furnish and Install Straw Wattles in Designated Disturbed Areas</td>
<td>$295,075</td>
<td>0 days</td>
<td>0 days</td>
</tr>
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</table>

Total amount of Change Orders 17 and 18, 30 and 31: $1,007,218
Total time extension: 7 days
Original Board authorized contract amount: $140,206,050.00
New executed contract amount: $142,161,892.70
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<tr>
<th>Change Order</th>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Milestone Time Extension</th>
<th>Contract Time Extension</th>
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<tbody>
<tr>
<td>19</td>
<td>1</td>
<td>Design Modification - Provide Outlet Tower and Fish Screen Modifications</td>
<td>$64,396</td>
<td>26 days to M3</td>
<td>26 days</td>
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<tr>
<td>19</td>
<td>2</td>
<td>Design Modification - Provide DCF Floor Modifications for Flow Meter Installation</td>
<td>$14,904</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>19</td>
<td>3</td>
<td>Administrative Modification - Extend Contract Milestone Completion Dates Due to Inclement Weather</td>
<td>$0</td>
<td>5 days to M2 5 days to M3</td>
<td>5 days</td>
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<tr>
<td>19</td>
<td>4</td>
<td>Differing Site Condition - Additional Excavation Required to Install DCF Ductbank</td>
<td>$687</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>20</td>
<td>1</td>
<td>Administrative Modification - Provide Crest Control Building Stairway Modifications</td>
<td>$10,342</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
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<td>Administrative Modification - Extend Contract Milestone Completion Dates Due to Inclement Weather</td>
<td>$0</td>
<td>19 days to M2 13 days to M3</td>
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<tr>
<td>20</td>
<td>3</td>
<td>Design Modification - Provide Low Level Outlet Bulkhead Modifications</td>
<td>$18,583</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>21</td>
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<td>Administrative Modification - Extend Contract Milestone Completion Dates Due to Inclement Weather</td>
<td>$0</td>
<td>12 days to M2 9 days to M3</td>
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<tr>
<td>22</td>
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<td>Administrative Modification - In-plant source inspection credit.</td>
<td>($456,916)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>24</td>
<td>1</td>
<td>Administrative Modification - Extend Contract Milestone Completion Dates Due to Inclement Weather</td>
<td>$0</td>
<td>8 days to M2 6 days to M3</td>
<td>6 days</td>
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<tr>
<td>24</td>
<td>2</td>
<td>Design Modification - Provide Outlet Tower Rebar Modifications - Lift 1</td>
<td>$7,848</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>24</td>
<td>3</td>
<td>Design Modification - Provide Foundation and Dam Drain Modifications for Cable Trays</td>
<td>$14,130</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>24</td>
<td>4</td>
<td>Design Modification - Credit for Deletion of Marina Storm Drain Laterals B1 and B2</td>
<td>($3,836)</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>24</td>
<td>5</td>
<td>Design Modification - Credit for Outlet Works Pipe Wall Thickness Modification</td>
<td>($397)</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>24</td>
<td>6</td>
<td>Design Modification - Provide Fiber Optic Terminations and Testing at San Vicente Pump Station and Downstream Control Facility</td>
<td>$11,170</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>24</td>
<td>7</td>
<td>Design Modification - Provide Gallery Access Building Roof Hatch Modifications</td>
<td>$7,932</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>24</td>
<td>8</td>
<td>Design Modification - Provide Chamfer on Exterior Corners of the Left Abutment Gallery Transition Structure</td>
<td>$2,283</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>24</td>
<td>9</td>
<td>Design Modification - Credit for Deletion of Backing Bars</td>
<td>($7,265)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>25</td>
<td>1</td>
<td>Administrative Modification - Increase Cement Quantity for GEVR</td>
<td>$160,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>26</td>
<td>1</td>
<td>Administrative Modification - Decrease Quantity for Cement for RCC - (Bid Item No. 49)</td>
<td>($255,000)</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>26</td>
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<td>Administrative Modification - Decrease Quantity for Pozzolan - (Bid Item No. 50)</td>
<td>($360,000)</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>26</td>
<td>3</td>
<td>Administrative Modification - Decrease Quantity for Mix, Cool, Convey, Place, Compact, and Cure RCC - (Bid Item No. 51)</td>
<td>($495,000)</td>
<td>0 days</td>
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<tr>
<td>26</td>
<td>4</td>
<td>Administrative Modification - Increase Quantity for Cement for GEVR - (Bid Item No. 52)</td>
<td>$160,000</td>
<td>0 days</td>
<td>0 days</td>
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<tr>
<td>26</td>
<td>5</td>
<td>Administrative Modification - Increase Quantity for Retarding Admixture for RCC - (Bid Item No. 53)</td>
<td>$27,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>26</td>
<td>6</td>
<td>Administrative Modification - Decrease Quantity for Produce and Stockpile RCC Aggregates - (Bid Item No. 56)</td>
<td>($897,000)</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>27</td>
<td>1</td>
<td>Administrative Modification - Credit for Deletion of Boat Ramp and Rip Rap - (Bid Item No. 16)</td>
<td>($500,000)</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>27</td>
<td>2</td>
<td>Administrative Modification - Increase Quantity for Quarry and Marina Excavation - (Bid Item No. 55)</td>
<td>$700,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
</tbody>
</table>
Change Orders 19 - 22, 24 - 27 approved at July 26, 2012 Board Meeting
Total amount of Change Orders 19 - 22, 24 - 27: $(1,626,139)
Total time extension: 59 days
Original Board authorized contract amount: $140,206,050.00
New Executed Contract Amount: $140,542,971.70

<table>
<thead>
<tr>
<th>Change Order</th>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Milestone Time Extension</th>
<th>Contract Time Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 3</td>
<td></td>
<td>Administrative Modification - Increase Quantity for Marina Fills - (Bid Item No. 57)</td>
<td>$150,000</td>
<td>0 days</td>
<td>0 days</td>
</tr>
</tbody>
</table>

**Authorized Executed Not Yet Executed**

<table>
<thead>
<tr>
<th>Board Approval Date</th>
<th>Authorized</th>
<th>Executed</th>
<th>Not Yet Executed</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 25, 2011</td>
<td>$350,000.00</td>
<td>$278,086.00</td>
<td>$71,914.00</td>
</tr>
<tr>
<td>December 8, 2011</td>
<td>$750,000.00</td>
<td>$683,091.00</td>
<td>$66,909.00</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$1,100,000.00</strong></td>
<td><strong>$961,177.00</strong></td>
<td><strong>$138,823.00</strong></td>
</tr>
</tbody>
</table>
January 16, 2013

Attention: Engineering and Operations Committee

Design-Build Performance Specification for the San Marcos Vent Desalination Modifications project. (Action)

Staff Recommendation
Authorize the General Manager to approve the Design-Build Performance Specification for the San Marcos Vent Desalination Modifications project.

Alternative
Reject the Design-Build Performance Specification for the San Marcos Vent Desalination Modifications Project and provide direction to staff on issues requiring resolution.

Fiscal Impact
There is no fiscal impact for approving the design-build performance specifications for this project. The rate category is transportation.

Background
The Water Purchase Agreement with Poseidon Resources includes the water supply and delivery infrastructure associated with the Carlsbad Desalination Plant. The Water Authority has also entered into an agreement with CH2M Hill, the operator of the Twin Oaks Valley Water Treatment Plant, to make plant modifications to accept and blend desalinated water at Twin Oaks. Lastly, the Water Authority must construct two aqueduct improvements to accommodate the delivery of desalinated water. These components are: 1) the relining and rehabilitation of Pipeline 3 between San Marcos and Twin Oaks to allow for higher operating pressures and 2) modifications to the San Marcos Vent.

The San Marcos Vent Desalination Modifications project will establish a pipe connection between Pipelines 3 and 4 which will enable the refilling of Pipeline 3 from Pipeline 4 while Pipeline 3 is being relined. The modifications to the vent and the connection between Pipelines 3 and 4 will ensure service to the south of the San Marcos Vent remains unchanged. The vent modifications must be operational by spring of 2014. See Attachment 1 for a location map.

Previous Board action: November 29, 2012, the Board adopted Resolution No. 2012-18 a resolution of the Board of Directors of the San Diego County Water Authority approving a Water Purchase Agreement and a Design-Build Agreement for pipeline improvements with Poseidon Resources, Channelside LP; approving an installment sale and assignment agreement with the San Diego County Water Authority Financing Agency and other agreements necessary to accomplish tax exempt project financing through the California Pollution Control Financing Authority; approving adjustments to the Capital Improvement Program Budget; approving supporting contracts and contract amendments; approving the Second Addendum to the City of Carlsbad Precise Development Plan and Desalination Project Environmental Impact Report (State Clearing House no. 2004041081); adopting a mitigation monitoring and reporting
program; authorizing the filing of a Notice of Determination; and authorizing the General Manager and General Counsel to execute agreements and take other actions necessary for implementation of the Carlsbad Desalination Project.

Discussion
The San Marcos Vent Desalination Modifications Project is the appropriate size and has limited complexity to allow the Water Authority to utilize the design-build procurement approach. Advantages to using this approach for the project include:

- Assigns a single-source responsible party for designing and constructing the project, minimizing opportunities for disputes between the Water Authority and the designers and constructors (i.e. change orders)
- Introduces efficient and effective design and construction considerations to meet time sensitive deadlines
- Design-build contractor assumes the risk of completing the project within the schedule and agreed upon cost

The design-build approach utilizes a competitive selection process based on performance specifications and criteria set forth by the Water Authority. The design-build procurement process consists of (1) issuing design-build contract documents and performance specifications in a Request for Proposals; (2) selection of a contractor based on best value combination of qualifications, project approach, and price; (3) negotiation of a contract; and (4) contract approval by the Board. The design-build project delivery method was affirmed by staff’s Gate process as the best method for this project.

The performance specifications describe the details of the project to be built and the specific performance criteria required of the contractor. The bullets below identify key components of the performance specification. See Attachment 2 for a more complete list of performance specifications for this project.

- Capacity of the hydraulic grade enhancement in Pipeline 4 shall be up to 450 cubic feet per second and shall be designed to require maintenance once per year or less.
- Capacity of the Pipeline 3/Pipeline 4 interconnect shall range between 40 cfs and 150 cfs.
- Both the hydraulic grade enhancement in Pipeline 4 and the P3/P4 interconnect shall be completed and operational by spring 2014.
- Pipeline 3 is anticipated to be shut down for relining for approximately 14 months. Pipeline 4 shall be limited to a 10-day shutdown for all connections. Proposals shall include a constructability component to address construction under live pipe conditions in Pipeline 4 and the measures necessary to complete tasks that require Pipeline 4 to be shut down.
- Pipelines 3 and 4 are treated water pipelines; appropriate protection and disinfection shall be required, and considered in all shutdown periods.
- A new permanent chain-link fence/concrete masonry unit structure shall protect the new facilities and existing vent structures.
• Analysis of project and system hydraulic impacts shall be submitted as part of the design-build process.
• The selection of the best value proposal will be based on a weighted scoring system considering experience, project approach, and price, as well as certain pass/fail requirements that must be met.

Section 4.08.090 (c) of the Administrative Code requires that performance specifications describing “the quality of construction materials, assemblies, and other information deemed necessary to adequately describe the Water Authority’s needs,” be approved by the Board prior to solicitation of the design-build Request for Proposals. Upon approval by the Board, these performance specifications will be incorporated into the Request for Proposals for the San Marcos Vent Desalination Modifications project. The final selection of the successful firm will be presented to the Board for approval at a future meeting.

Prepared by: Jeremy Crutchfield, Engineer (P.E.)
Reviewed by: William J. Rose, Director of Engineering
Approved by: Frank Belock, Jr., Deputy General Manager

Attachments:
1. Location Maps
2. Performance Specifications Table
## San Marcos Vent Desalination Modifications
### Performance Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pipeline 4 Capacity</td>
<td>Up to 450 cubic feet per second of treated water</td>
</tr>
<tr>
<td>2. P3/P4 Interconnect Capacity</td>
<td>40 - 120 cubic feet per second of treated water</td>
</tr>
<tr>
<td>3. Permanent Desalination Project Connection Facilities Capacity</td>
<td>Up to 135 cubic feet per second of treated water</td>
</tr>
<tr>
<td>4. Design Life</td>
<td>75 years</td>
</tr>
<tr>
<td>5. Pipeline 4 Hydraulic Grade at Vent Structure</td>
<td>Elevation 988.9 (pipe invert elevation is 978)</td>
</tr>
<tr>
<td>6. Pipeline 3 Hydraulic Grade at Vent Structure</td>
<td>Elevation 985.7 (pipe invert elevation is 979)</td>
</tr>
<tr>
<td>7. Anticipated Head Loss through Permanent Desalination Project Connection Facilities</td>
<td>13.5 feet (preliminary)</td>
</tr>
<tr>
<td>8. Pipeline 3 Hydraulic Grade at Permanent Desalination Project Connection Facilities</td>
<td>Elevation 1023.8 (pipe invert elevation is 557)</td>
</tr>
<tr>
<td>9. Architectural Design</td>
<td>Follow architectural design requirements to have facility blend into surrounding area as much as possible</td>
</tr>
<tr>
<td>10. Disinfection</td>
<td>Disinfection of affected piping and structures</td>
</tr>
<tr>
<td>11. Maintenance</td>
<td>Facilities shall be designed to require maintenance once per year or less</td>
</tr>
<tr>
<td>13. Access</td>
<td>Slight clearing and or surface modifications may be necessary for access to the site from both the south and north. No permanent improvements required.</td>
</tr>
<tr>
<td>14. Security</td>
<td>Permanent chain-link fence/concrete masonry unit wall (to be determined) surrounding facilities, including existing vent structures</td>
</tr>
<tr>
<td>15. Schedule</td>
<td>Facilities shall be fully operational by spring 2014</td>
</tr>
<tr>
<td>16. Aqueduct Shutdowns</td>
<td>Pipeline 3 is anticipated to be shutdown for approximately 14 months beginning in January 2014. Pipeline 4 shall be limited to a 10-day shutdown for all connections. This duration typically allows eight days for the contractor to complete the work. Proposals shall include a constructability component to address live pipe conditions in Pipeline 4 and the measures necessary to complete tasks that require Pipeline 4 to be empty.</td>
</tr>
<tr>
<td>17. Hydraulic Analysis</td>
<td>An analysis shall be performed to verify project criteria needed to meet delivery requirements and evaluate impacts to existing infrastructure</td>
</tr>
<tr>
<td>18. Public Outreach Measures</td>
<td>DB Entity to be attentive and potentially responsive to community concerns/complaints</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>20. Convenience Termination Clause</td>
<td>Water Authority may terminate the Service Contract at any time for convenience, per a negotiated payment schedule</td>
</tr>
<tr>
<td>21. Selection Criteria</td>
<td>Selection of best value proposal will be based on certain pass/fail requirements and proposal weighting that considers experience, project approach and price</td>
</tr>
<tr>
<td>22. Risk Profile</td>
<td>Accept the risk profile for the Service Contract included in the risk matrix</td>
</tr>
<tr>
<td>23. Environmental Mitigation</td>
<td>Adhere to all environmental mitigation requirements included in the approved Final Environmental Impact Report and Addendum</td>
</tr>
</tbody>
</table>
January 16, 2013

Attention: Engineering and Operations Committee

Gregory Canyon Landfill (Action)

Purpose
This report requests authorization for the General Manager to submit a comment letter to the U.S. Army Corps of Engineers on behalf of the Board of Directors.

Staff Recommendation
Authorize the General Manager to send the U.S. Army Corps of Engineers comments regarding the Draft Environmental Impact Statement for the Gregory Canyon Landfill.

Alternatives
Do not authorize submittal of a comment letter.

Fiscal Impact
There is no fiscal impact.

Background
In 1994, and again in 2004, San Diego County voters authorized development of a municipal solid waste (Class III) landfill and recycling collection center under the provisions of Proposition C. The proposed Gregory Canyon landfill is located outside the Water Authority service area along the southerly bank of the San Luis Rey River, with a portion of the First San Diego Aqueduct located inside the project limits.

The landfill project has been the subject of numerous technical studies, several rounds of public review, and multiple legal proceedings over the years. When appropriate, the Water Authority has provided comments regarding potential adverse impacts of the proposed landfill on local surface and ground water resources, and adjacent Water Authority conveyance facilities.

The landfill requires a number of major permits and approvals before construction can commence. To date, a Final Environmental Impact Report was certified pursuant to CEQA and a Solid Waste Facility Permit (SWFP) was issued by the County of San Diego Solid Waste Local Enforcement Agency. The SWFP requires the project applicant to “provide the Local Enforcement Agency with a copy of the executed agreement between Gregory Canyon, Ltd. and the San Diego County Water Authority providing for relocation and protection of the San Diego Aqueduct pipelines.”

Permits or approvals are still required from the following agencies: the U.S. Army Corps of Engineers, State/Regional Water Quality Control Board, California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, San Diego County Air Pollution Control District, California Department of Transportation, California Public Utilities Commission, various
County of San Diego departments, and the San Diego County Water Authority. Because the Board determined the landfill raised special issues, it reserved authorization to take action or provide direction regarding the issuance of the required Water Authority encroachment permit.

Discussion
On December 11, 2012, the U.S. Army Corps of Engineers (Corps) released a Draft Environmental Impact Statement (EIS) in response to a Clean Water Act Section 404 permit application filed by Gregory Canyon, Ltd., the landfill proponent. Based on a Corps jurisdictional determination, the landfill would affect approximately 1 acre of “waters of the United States”, a resource regulated by the Corps. The Corps concluded that an EIS would be prepared to comply with the National Environmental Policy Act (NEPA) before considering issuance of a 404 permit.

The EIS analyzes many of the same topics that were covered in prior environmental documents and several Water Authority issues remain unaddressed. Consequently, staff requests authorization to prepare and submit a comment letter that reiterates the following general concerns:

1. Proximity of landfill activities to Pipelines 1 and 2 (repeated blasting, excavation, and corrosion from landfill leachate and gas).
2. Proposed use of Water Authority right of way for landfill components (haul roads, drainage channels, biological mitigation, and soil stockpiles).
3. Omission of the approved, but not yet built, Pipeline 6 from analysis.
4. Possible inconsistency with the Water Authority Habitat Conservation Plan/Natural Community Conservation Plan.
5. Proposed aqueduct relocation as an “optional” project component.
6. Measures to protect local surface and ground water resources for existing and future use by Water Authority member agencies and private citizens.

The Draft EIS will be available for comment during a 120 day public review period. Comments on the environmental analysis will be accepted through April 15, 2013. The document can be accessed at http://www.spl.usace.army.mil/Missions/Regulatory/ProjectsPrograms.aspx. A public hearing to receive oral and written comments will be held on January 31, 2013 in Escondido. The Final EIS will be prepared after the public comment period closes, followed by a Corps decision on issuance of the 404 permit.

Prepared by: Laurence Purcell, Water Resources Manager
Reviewed by: Ken Weinberg, Director of Water Resources
Reviewed by: William J. Rose, Director of Engineering
Approved by: Frank Belock Jr., Deputy General Manager
4677 Overland Avenue
San Diego, California 92123

FORMAL BOARD OF DIRECTORS’ MEETING

The mission of the San Diego County Water Authority is to provide a safe and reliable
supply of water to its member agencies serving the San Diego region.

January 24, 2013

3:00 p.m.

1. Call to Order.

2. Salute to the flag.

3. Roll call, determination of quorum.
   3-A Report on proxies received.

4. Additions to agenda. (Government code Sec. 54954.2(b)).

5. Approve the minutes of the Special Board of Directors’ meeting of November 8, 2012,

6. Opportunity for members of the public who wish to address the Board on matters within
   the Board’s jurisdiction.

7. PRESENTATIONS & PUBLIC HEARINGS
   7-A Retirement of Director. Adopt Resolution 2013-_ honoring Richard Smith upon
   his retirement from the Board of Directors.
   7-B Appointment of Director. DeAna Verbeke representing Helix Water District.
   Term expires August 18, 2013.
   7-C Retirement of Director. Adopt Resolution 2013- honoring James Bond upon his
   retirement from the Board of Directors.
   7-D Appointment of Director. Mark Muir representing San Dieguito Municipal Water
   District. Term expires December 21, 2014.
   7-E Reappointment of Director. Reappointment of Frank Hilliker, Lakeside Water
   District. Term expires January 8, 2019.
8. REPORTS BY CHAIRS
8-A Chairs report: Chair Wornham

8-B Report by Committee Chairs
Administrative and Finance Committee    Director Saunders
Water Planning Committee     Director Weston
Imported Water Committee     Director Saxod
Legislation, Conservation and Outreach Committee Director Topolovac
Engineering and Operations Committee Director Brady

9. CONSENT CALENDAR

9- 1. Treasurer’s report.
Note and file the monthly Treasurer’s report.

9- 2. Authorize the issuance of Senior Lien Water Revenue Refunding Bonds – Series 2013A to refund certain outstanding long-term debt to yield debt service savings.
Adopt a resolution authorizing the issuance of Senior Lien Water Revenue Refunding Bonds, Series 2013A, for the purpose of refunding certain existing long-term debt; and authorize the Director of Finance to utilize a negotiated method of sale. Approve the forms of financing documents for both refunding bond issuances, including the Preliminary Official Statements for the 2013A Bonds.

9- 3. Authorize submittal of Proposition 84, Round 2, Integrated Regional Water Management Implementation Grant Application.
Adopt Resolution No. 2013-_____ authorizing the General Manager to submit a Proposition 84, Round 2, Integrated Regional Water Management Implementation Grant Application.

Authorize the General Manager to execute an agreement with San Diego Gas & Electric Company to implement water and energy efficiency programs.

9- 5. Professional services contract with LEE & RO, Inc. for design of the Miramar Pump Station Rehabilitation project.
Authorize the General Manager to award a professional services contract in the amount of $489,832 to LEE & RO, Inc. for the design of the Miramar Pump Station Rehabilitation project.
9- 6. **Project Delivery Work Group Recommendations.**
During the last half of 2013, provide the E&O Committee a presentation on the Gate Process and how it guides a capital project through the various project phases. Use the Nob Hill project as an example of how the Gate Process works. Provide Gate information at the time of each Board action on the project, and provide information presentations at key gates that don’t require Board action. Provide the Board information regarding past project performance (e.g. change orders).

9- 7. **Change Orders to Shimmick/Obayashi Joint Venture for the San Vicente Dam Raise Package 3 – Roller Compacted Concrete Dams and Appurtenant Facilities project.**
Accept Shimmick/Obayashi Joint Venture Change Orders 28, 29 and 32 through 36 for a credit of $65,688; and authorize the General Manager to execute a change order for up to $500,000 for interim storm water conveyance improvements, increasing the authorized contract amount from $140,681,794.70 to $141,116,106.70.

9- 8. **Design-Build Performance Specification for the San Marcos Vent Desalination Modifications project.**
Authorize the General Manager to approve the Design-Build performance specification for the San Marcos Vent Desalination Modifications project.

9- 9. **Gregory Canyon Landfill.**
Authorize the General Manager to send the U.S. Army Corps of Engineers comments regarding the Draft Environmental Impact Statement for the Gregory Canyon Landfill.

10. **ACTION / DISCUSSION**

10-A **Election of Vice Chair for January 24, 2013 - September 30, 2014.**
The following Board member was nominated:
Vice Chair: Mark Weston  (Action)

10-B **Recommendation for Appointment of Director Michael T. Hogan as the Representative and Director Bud Pocklington as the Alternate Representative to the Colorado River Board of California.**
Adopt Resolution No. 2013-__ a Resolution of the San Diego County Water Authority submitting names and requesting appointment by the Governor of Michael T. Hogan as the Water Authority’s Representative and Bud Pocklington as the Water Authority’s Alternate Representative to the Colorado River Board of California.  (Action)
11. CLOSED SESSION(S)

11-A CLOSED SESSIONS:
Conference with Legal Counsel – Existing Litigation
Government Code §54956.9(a)
Name of Case: QSA Judicial Council Coordination
Proceeding No. 4353

Conference with Legal Counsel - Existing Litigation
Government Code §54956.9(a)
Name of Case: State Water Resources Control Board (SWRCB)
Imperial Irrigation District and San Diego County Water Authority
Joint Petition for Modification of Revised Order WRO 2002-0013
(Permit 7643, Application 7482)

11-B CLOSED SESSION:
Conference with Legal Counsel - Existing Litigation
Government Code §54956.9(a)
SDCWA v Metropolitan Water District of Southern California;
Case Nos. CPF-10-510830 and CPF-12-512466

12. Action following Closed Session

13. SPECIAL REPORTS
13-A GENERAL MANAGER’S REPORT – Ms. Stapleton
13-B GENERAL COUNSEL’S REPORT – Mr. Hentschke
13-C SANDAG REPORT – Chair Wornham
   SANDAG Subcommittee: Borders/Regional Planning Committee –
   Director Douglas
13-D AB 1234 Compliance Reports – Directors

14. OTHER COMMUNICATIONS

15. ADJOURNMENT

Doria F. Lore
Clerk of the Board

NOTE: The agendas for the Formal Board meeting and the meetings of the Standing Committees
held on the day of the regular Board meeting are considered a single agenda. All information or
possible action items on the agenda of committees or the Board may be deliberated by and become
subject to consideration and action by the Board.
1. **Call to order.**
   Chair Wornham called the meeting to order at 1:35 p.m.

2. **Roll call.**
   Directors present were Arant, Bailey, Barnum, Bond, Brady, Croucher, Dailey, Dion, Douglas, Hilliker, Knutson, Lamb, Lewinger, Linden, Madaffer, Miller, Morrison, Mudd, Price, Sanford, Saunders, Saxod, Smith, Steiner, Topolovac, Tu, Watton, Weston, Wight, Williams, Wilson, and Wornham. Directors absent were Boyle, Hogan, Pocklington, Simpson, and Representative Slater-Price.

   Staff present included General Manager Stapleton, General Counsel Hentschke, Deputy General Managers Belock and Kerl, Director of Water Resources Weinberg, Water Resources Manager Yamada and Financial Planning Manager Shank. David Moore, Managing Director of Clean Energy Capital was also present.

   **2-A Report on proxies received.** There were no proxies received.

   Chair Wornham welcomed Jim Madaffer to the Board of Directors

3. **Public Comment.**
   Chair Wornham announced the public speakers had requested to speak after the presentations.

4. **Workshop on issues related to the Carlsbad Desalination Project.**
   Chair Wornham announced the items would be presented in the following order: 4-B, then 4-C, followed by 4-A.

   **4-B Forecasting electricity prices for desalination.**

   Mr. Weinberg introduced Dr. Moore who began the presentation. He reviewed the projected electricity price and the impact on water unit price.

   There was one public speaker that wished to speak at this time:

   1. Jerry Sanders, Mayor of San Diego spoke in favor of the project. He stated the project was vital to the San Diego region to sustain the economy and the quality of life.
4-C  Response to previous Board member questions regarding pricing and terms in the proposed Water Purchase Agreement.

Dr. Moore returned and provided a detailed review of unit price cost components. This included debt service charge, equity return charge, pipeline installment payments and fixed and variable operating and electricity charges. He explained the bond interest rate assumptions and stated the final interest rate would not be known until the financial closing.

Mr. Yamada then spoke about the non-electricity Operating and Maintenance costs. He covered the fixed operator compensation including labor, maintenance, membrane and filter replacement, operator fees, insurance and bond. The total for this would be $11,871,000. The total fixed non-operator costs were $7,326,000 including lease payments, owner insurance, mitigation/monitoring, property taxes, administrative costs, and debt fees. The variable operating costs included chemical dosing of raw water, pre-treatment cleaning and disposal of solids and operator fee totaled $4,848,000.

Mr. Yamada then responded to questions Board members had asked about the consequences of delaying the decision on the Water Purchase Agreement at prior meetings. The lease was executed in 2003 and had been amended ten times and NRG was considering other redevelopment options. Further extension would be required if the Water Purchase Agreement was not approved in November of 2012.

Kiewit-Shea Desalination construction bid was submitted in 2010 and there was a risk of losing key members of the project management team to other projects. The pricing commitment would expire on December 31, 2012, and would then need to be re-costed. IDE bid was submitted in 2008 and the pricing commitment would expire on December 31, 2012. There were financing concerns as the current market conditions were favorable for issuance of “BBB” municipal bonds, interest rates remain at historical lows, credit spreads (between AAA and BBB) are tight, and market conditions could change abruptly, especially with regard to credit spreads.

Director Watton requested a copy of the lease, and a complete listing of investors.

4-A  Continuation of discussion on rate structure alternatives.

Mr. Weinberg announced this item was a continuation from several other Board meeting and a follow up from information sent to the member agencies and the Board. He reviewed the High/Low all-in Treated Water Rate Projection – February 2011, revised projections with no change in Desal assumptions, revised projections with new Desal assumptions, February 2011 High/Low vs. Desal High/Low and finally Illustrative Smoothed High/Low Rate ramp.

Mr. Weinberg stated the next step was to begin the Cost of Service study. There would be two steps in this process, an analysis of the 2014 rates and the allocation of the desalination costs. The consultant would begin work in December of 2012. The process would be interactive with member agencies from January to April of 2013 and the Cost of Service Study would be complete.
May of 2013. The allocation of desalination cost and potential fixed charge modifications to rate structure would be concurrent with the 2014 Cost of Service study. There would be a member agency workgroup established in winter of 2013 for technical discussions. The workgroup would report to the Administrative and Finance Committee and return to the Board with technical recommendations. It was estimated it would be a six to nine month process consistent with the 2015 rate setting process.

Director Arant expressed concern and stated he had sent a letter to the member agencies and Board of Directors. Director Wilson stated he too would be submitting a letter and was concerned about the cost allocation.

Additional Public Comments were taken at this time:

2. Livia Borak from the Coast Law Group spoke in opposition to the project. She stated the Water Purchase Agreement should not be approved until after the Cost of Service study is completed.

3. Clif Williams a resident from the city of San Diego spoke in support of the project. He stated we need the supply to ensure water security for the region.

5. **Adjournment.**  
There being no further business to come before the Board, Chair Wornham adjourned the meeting at 4:20 p.m.

Thomas V. Wornham, Chair
1. **Call to order.**
   Chair Wornham called the meeting to order at 1:35 p.m.

2. **Roll call.**
   Directors present were Arant, Bailey, Barnum, Bond, Boyle, Brady, Croucher, Dailey, Dion, Douglas, Hilliker, Hogan, Knutson, Lamb, Lewinger, Linden, Madaffer, Miller, Mudd, Pocklington, Price, Sanford, Saxod, Smith, Steiner, Topolovac, Tu, Watton, Weston, Wight, Williams, Wilson, and Wornham. Directors absent were Morrison, Saunders, Simpson and Representative Slater-Price.

   Staff present included General Counsel Hentschke, Deputy General Managers Belock and Kerl, Director of Water Resources Weinberg, Water Resources Manager Yamada, Water Resources Manager Purcell, Principal Engineer Chamberlain and Financial Planning Manager Shank.

   **2-A Report on proxies received.** There were no proxies received.

3. **Public Comment.**
   The public speakers that wished to speak at this time were:

   1. John Mendez, a resident of Chula Vista who spoke in favor of the project.
   2. Deanna Spehn from Senator Christine Kehoe’s office read a letter from the Senator in favor of the project.
   3. Victor Esparza from IVOE Local #12 spoke in favor of the project.
   4. Johnny Swanson from the Iron Workers Union spoke in favor of the project.
   5. Gary Sallis from the Plumbers and Steamfitters Local 230 spoke in favor of the project.
   6. James Alvarez from the Iron Worker Union spoke in favor of the project.

4. **Workshop on issues related to the Carlsbad Desalination Project.**
   **4-A Carlsbad Desalination Project CEQA review.**

   Mr. Weinberg introduced Mr. Purcell who presented on CEQA compliance.
4-B Other actions related to consideration of Water Purchase Agreement.

Mr. Chamberlain presented on the additional related agreements and Board actions that would be required to fully implement the entire project. This included CEQA compliance, facility-related Water Authority responsibilities, bond financing documents, and member agency purchase contracts.

He stated the Board action related to the Design-Build Agreement for the water pipeline improvements would cover the conveyance pipeline that would deliver the desalinated product water from the Carlsbad plant site to the Second Aqueduct. In addition, he covered the CIP budget adjustments that would be needed, the Twin Oaks Valley Water Treatment Plant Service Contract amendments, other consultant support contract amendments, and bond financing agreements.

4-C Discussion of questions regarding Water Purchase Agreement for Carlsbad Desalination Project and related issues.

Mr. Weinberg began the presentation reviewing the deliberation process. He stated it had been 29 months since the approval of the Term Sheet. There had been over 30 Public meeting held regarding the Water Purchase Agreement and the Desalination Project. He reviewed all of the topics that had been addressed, all of the Member Agency presentations, and then addressed the specific Board member questions that had been asked.

Director Watton expressed concern that the bond would be back loaded. He asked for a list of who the investors in Poseidon are. He asked for a copy of Poseidon’s lease. Mr. Hentschke stated Poseidon had responded that the information in the lease was a protected trade secret and not disclosable under the Public Records Act. Director Watton had stated he might renew his request to get an official written opinion.

Director Madaffer expressed concern about signing the Water Purchase Agreement without reviewing the lease. Mr. Weinberg responded the General Counsel, outside Counsel, Water Authority staff, and the Desalination Advisory Committee had reviewed the lease.

Director Wilson stated he had handed out a letter at the November 8, 2012 meeting and requested a response to his letter. Ms. Kerl announced staff was working on responding to his letter.

Director Mudd asked for the Board packet to be delivered on November 20, 2012. Ms. Kerl stated staff would do their best to deliver the documents as soon as possible.

Director Topolovac stated the Water Authority agreed six to eight years ago there was a need for a Desalination project. He stated the real question was “What is the cost if we don’t have a Desalination Project?” That would be answered in 2016 and 2025. He stated we really don’t know the value of something until we don’t have it.
Director Wight requested a copy of the Request for Proposal and the contract for the Cost of Service Study.

Director Lewinger stated the Board had been working on the project over ten years. A vote needed to happen, either move forward with the project or kill the project. If the no votes won, he requested an item be placed on the January 2013 agenda on the Water Resources Master Plan regarding what would replace the water supply from the west.

Director Douglas questioned how many more meetings were needed? Carlsbad had been working on this project for 15 years. She stated either vote yes or no and move on.

Director Dailey stated she appeared before her City Council and said if the Water Purchase Agreement was not approved this would withhold from the population of this region the most reliable local supply of water available, which was the mission of the Water Authority.

The additional public speakers spoke at this time:

7. Ann-Kathrin Ostemeyer with the Surfrider Foundation spoke in opposition to the project. She stated it was too expensive and uses too much energy.
8. Julia Chunn-Heer from the Surfrider Foundation spoke in opposition to the project.
9. Don Christiansen a resident of Carlsbad spoke in favor of the project.
10. James Cunningham from Plumbers & Pipefighters Local 230 spoke in favor of the project.
11. Mike Hartley from UA Local 230 spoke in favor of the project.

5. Adjournment.
There being no further business to come before the Board, Chair Wornham adjourned the meeting at 3:55 p.m.

Thomas V. Wornham, Chair
MINUTES OF THE FORMAL BOARD OF DIRECTORS’ MEETING  
NOVEMBER 29, 2012  

ADMINISTRATIVE AND FINANCE COMMITTEE  
CALL TO ORDER / ROLL CALL  
Chair Wight called the Administrative and Finance Committee meeting to order at 9:00 a.m. Committee members present were Chair Wight, Vice Chair Bond, Directors Bailey, Brady, Dion, Douglas, Hilliker*, Price, Saunders, Smith, Topolovac, and Wornham. Committee members absent were Vice Chair Croucher and Director Arant. At that time, there was a quorum of the Board, however only Committee members participated in the vote. Also present were Directors Barnum, Dailey, Hogan, Knutson, Lamb, Lewinger, Madaffer, Mudd, Saxod, Simpson, Steiner, Tu, Weston, and Wilson.  

* Director Hilliker arrived at 9:01 a.m. 

Staff present was General Manager Stapleton, General Counsel Hentschke, Deputy General Managers Belock and Kerl, Assistant General Manager Cushman, Director of Finance/Treasurer McCraner, Director of Human Resources Leone, Director of Administrative Services Young, Financial Planning Manager Shank, Budget and Analysis Manager Celaya, Controller Greek, and Senior Human Resources Analyst Clement.  

ADDITIONS TO AGENDA  
There were no additions to the agenda.  

PUBLIC COMMENT  
There were no members of the public who wished to speak.  

CHAIR’S REPORT  
Chair Wight reviewed the final report on the Administrative and Finance Committee’s Goals for 2011 and 2012, highlighting the following activities taken by the Committee: 

1) Approved two debt refunding transactions of existing debt resulting in net present value savings of $18.7 million;  
2) Approved a strategy for dealing with expiring liquidity facilities which backed by the Water Authority’s $460 million Commercial Paper Program, and renegotiated an existing facility, the replacement of expiring facilities, and the issuance of a 5-year fixed rate note to refund $100 million in Commercial Paper notes;  
3) Recommended adoption of the Multi-Year Budget for Fiscal Years 2012 and 2013 which included 16 percent reduction in total budgeted expenditures, 42 percent reduction in budgeted CIP expenditures, and a 16 percent reduction in staff. 

Chair Wight thanked the Vice Chairs, Committee members, and staff for all their hard work over the past two years. Director Wornham thanked Chair Wight for her leadership on the Committee.
DIRECTORS’ COMMENTS
There were no Director’s comments.

I. CONSENT CALENDAR
1. Treasurer’s Report.
   Staff recommendation: Note and file the monthly Treasurer’s report.

2. Vote Entitlement Resolution for Calendar Year 2013.
   Staff recommendation: Adopt Resolution 2012-17 establishing the vote and representative entitlements of each member agency effective January 1, 2013.

3. Fiscal Years 2012 and 2013 additional litigation expenses.
   Staff recommendation: Amend the General Counsel’s Fiscal Year 2012 and 2013 Department Budget by an amount not-to-exceed $3.5 million for additional litigation expenses.

4. Amendment to Professional Services Contract with Mercer Health and Benefits, LLC, to increase the amount by $150,000 and extend the term by 30 months for providing Health Insurance Broker Services.
   Staff recommendation: Authorize execution of an amendment in the amount of $150,000, for a total contract amount no-to-exceed $300,000 and extending the term by 30 months.

Director Smith moved, seconded by Director Saunders, and the motion passed unanimously to approve the Consent Calendar.

II. ACTION/DISCUSSION
1. Annual Statement of Investment Policy and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2013.
   Staff recommendation: Adopt the Annual Statement of Investment Policy and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2013.

Chair Wight congratulated staff on receiving the Certification of Excellence from the Association of Public Treasurers of the United States and Canada for conformance to the Specified Standards of Investment Policy as established by the association. Chair Wight congratulated David Shank and Patti Cirello for a job well done.

Director Douglas moved, Director Dion seconded, and the motion passed unanimously to approve item 1.
2. **Professional services contract with Carollo Engineers Inc. for a Cost of Service Study.**
   
   **Staff recommendation:** Authorize the General Manager to award a professional services contract to Carollo Engineers Inc. for an amount not-to-exceed $106,000 for a cost of service study.

   Mr. Shank provided a presentation on the item, which included an overview of the selection process, Request for Proposals responses, scope of services, and the staff recommendation.

   Chair Wornham requested the staff recommendation be amended to include the following statement: *Direct the General Manager to add scope and funding to the contract sufficient to allow robust member agency participation including (Board of Directors, General Managers and Finance Officers) in the review of assumptions and development of a preferred rate structure alternative.*

   Directors asked questions and made comments. Ms. Stapleton and Director Wornham provided answers.

   Director Smith moved, Director Saunders seconded, and the amended motion passed unanimously.

III. **INFORMATION**

   The following items were noted and filed:
   1. Controller’s report on monthly financial statements
   2. Board calendar

IV. **CLOSED SESSION**

   There were no closed session items.

V. **ADJOURNMENT**

   There being no further business to come before the Administrative and Finance Committee, Chair Wight adjourned the meeting at 9:15 a.m.

**ENGINEERING AND OPERATIONS COMMITTEE**

**CALL TO ORDER / ROLL CALL**

   Chair Knutson called the Engineering and Operations Committee meeting to order at 9:19 a.m. Committee members present were Chair Knutson, Vice Chair Dailey, Directors Bailey, Barnum, Hogan, Lamb, Lewinger, Miller, Mudd, Saxod, Smith, Williams and Wilson. Committee members absent were Vice Chair Pocklington and Director Morrison. Also present were Directors Bond, Boyle, Brady, Dion, Douglas, Hilliker, Price, Saunders, Simpson, Steiner, Topolovac, Tu, Weston, and Wornham. At that time, there was a quorum of the full Board, and the meeting was conducted as a meeting of the Board, however only committee members participated in the vote.
Staff present was General Manager Stapleton, General Counsel Hentschke, Deputy General Manager Belock, Deputy General Manager Kerl, Assistant General Manager Cushman, Director of Engineering Rose, Director of Operations and Maintenance Eaton, Engineering Manager Reed, and Principal Construction Manager Kenny.

**ADDITIONS TO AGENDA**

There were no additions to the agenda.

**PUBLIC COMMENT**

There were no members of the public who wished to speak.

**CHAIR’S REPORT**

Chair Knutson announced that the Project Delivery Work Group met for the second time November 1, 2012. The next meeting would be in January, and a final report would be given at the January 24, 2013 Board meeting. Chair Knutson announced that the Final Report on the Engineering and Operations Committee’s Goals for 2011 and 2012 was included in the Board packet. Chair Knutson thanked the committee members for their input and guidance to staff, and expressed his thanks to Mr. Rose and Mr. Eaton and staff.

Vice Chair Dailey expressed her appreciation to Engineering and Operations and Maintenance staff for their hard work in accomplishing the committee’s goals.

**DIRECTORS’ COMMENTS**

There were no Directors’ comments.

**I. CONSENT CALENDAR**

There were no items under Consent.

**II. ACTION/DISCUSSION**

1. Notices of Completion for the Lake Hodges Pump Station project, Specification 554.
   
   **Staff recommendation:** Authorize the General Manager to accept the Lake Hodges project as complete and record the Notices of Completion for the Archer Western and Andritz contracts.

   Principal Construction Manager Kenny gave a presentation on the Notice of Completion for the Lake Hodges Pump Station Project. Mr. Kenny reviewed the project purpose (water operations and power generation), pump house detail, and the prerequisites for Notices of Completion.

   Director Lewinger moved, Vice Chair Dailey seconded, and the motion to approve staff’s recommendation passed unanimously.
III. INFORMATION

1. Presentation on San Vicente Dam Raise Project update.

Mr. Reed gave a presentation on the San Vicente Dam Raise which reviewed the work in progress on the top of the dam, the outlet tower, and the downstream control facility. He also went over the upcoming activities including installation of mechanical/electrical systems, site acceptance test, commissioning of new facilities, decommissioning of existing facilities, filling to height of existing dam, DSOD raised dam certification, and construction of the Marina.

IV. CLOSED SESSION

There were no closed session items on the agenda.

V. ADJOURNMENT

There being no further business to come before the Engineering and Operations Committee, Chair Knutson adjourned the meeting at 9:33 a.m.

LEGISLATION, CONSERVATION AND OUTREACH COMMITTEE

CALL TO ORDER/ROLL CALL

Chair Saxod called the Legislation, Conservation and Outreach Committee to order at 9:40 a.m. Committee members present were Chair Saxod, Vice Chairs Hilliker and Weston, and Directors Boyle, Dailey, Douglas, Madaffer, Miller, Simpson, Topolovac, Tu and Wornham. Committee members absent were Croucher, Mudd, and Sanford. Other Board members present were Directors Bailey, Barnum, Bond, Brady, Dion, Hogan, Knutson, Lamb, Lewinger, Price, Saunders, Steiner and Wilson. At that time, there was a quorum of the Board and the meeting was conducted as a meeting of the Board; however, only committee members participated in the vote.

Staff present were General Manager Stapleton, General Counsel Hentschke, Deputy General Manager Belock, Assistant General Manager Cushman, Director of Public Outreach and Conservation Foster and Management Analyst Schnell.

ADDITIONS TO AGENDA

There were no additions to the agenda.

PUBLIC COMMENT

There were no members of the public who wished to address the Committee.

CHAIR'S REPORT

Chair Saxod commented on the LCO committee highlights of the last two years. Some of those highlights included meeting all LCO committee goals, adoption of the Legislative Policy Guidelines for 2012 and sponsoring of several bills. Also accomplished were the adoption of the Water Use Efficiency Policy Principles and several new communication tools.

Chair Saxod thanked Vice-Chairs Hilliker and Weston, former Vice-Chair Jungreis, Directors and staff for their work on the LCO committee.
DIRECTORS’ COMMENTS

I. CONSENT CALENDAR
There were no items on the Consent Calendar.

II. ACTION/DISCUSSION
1. Legislative Issues.
   1-A Report by Carpi and Clay.

   Mr. Clay reported on legislative issues, including the passage of Prop30 and Prop39 and new members of the Legislature being sworn in. He noted half of the Assembly will be new.

   1-B Adopt Proposed 2013 Legislative Policy Guidelines.
   Adopt the proposed 2013 Legislative Policy Guidelines.

   Ms. Schnell presented the proposed 2013 Legislative Policy guidelines. Director Dailey moved, Director Hilliker seconded, and the motion passed unanimously to adopt the proposed 2013 Legislative Policy Guidelines.

   1-C Sponsorship of two bills in the State legislature.
   Staff recommendation: Sponsor legislation that:
   1. Moves augmentation of raw water supplies with advanced treated purified water and direct potable reuse to the Health and Safety Code, instead of defining it as a waste in the Water Code.
   2. Requires the California Air Resources Board to develop a program that returns revenues from the purchase of greenhouse gas emission permits by the Metropolitan Water District to retail water agencies that purchase MWD water.

   Mr. Cushman presented on two bills in the State legislature, recommending sponsorship of both bills. Director Wornham moved, Director Dailey seconded, to adopt staff recommendation and the motion passed unanimously to sponsor the bills in the State legislature.

   1-D Amend agreements with Carpi & Clay, Sacramento; Lang, Hansen, O’Malley and Miller; V. John White Associates; and Carpi, Clay & Smith, Washington D.C., for legislative advocacy and government relations services.
   Staff recommendation: Amend the agreements for legislative advocacy services through December 31, 2014, for a period of 24 additional months, for Carpi & Clay; Lang, Hansen, O’Malley and Miller; V. John White Associates; and Carpi, Clay & Smith, increasing total funding for the four agreements by $1,016,256, to an amount not-to-exceed $2,970,739.
Mr. Cushman presented a recommendation to amend current agreements with legislative advocacy and government relations services firms by extending the agreements. Director Weston moved, Director Tu seconded, to adopt staff recommendation and the motion passed unanimously to amend agreements with Carpi & Clay, Sacramento; Lang, Hansen, O’Malley and Miller; V. John White Associates; and Carpi, Clay & Smith, Washington D.C., for legislative advocacy and government relations services.

III. INFORMATION
The committee received and filed the following items:
1. Small Contractor Outreach and Opportunities Program Quarterly report.
2. Quarterly report on Public Outreach and Conservation department activities.

IV. ADJOURNMENT
There being no further business to come before the Legislation, Conservation and Outreach Committee, Chair Saxod adjourned the meeting at 10:00 a.m.

WATER PLANNING COMMITTEE
CALL TO ORDER/ROLL CALL
Chair Dion called the Water Planning Committee Meeting to order at 10:10 a.m. Committee members present were Chair Dion, Vice Chairs Price and Saunders, Directors Boyle, Hogan, Lamb, Linden, Pocklington, Simpson, Steiner, Watton and Williams. Committee member Sanford was absent. Also present were Directors Arant, Barnum, Bond, Brady, Dailey, Douglas, Hilliker, Knutson, Lewinger, Miller, Mudd, Saxod, Smith, Topolovac, Weston, Wilson and Wornham. At that time, there was a quorum of the Board and the meeting was conducted as a meeting of the Board; however, only committee members participated in the vote.

Staff present was General Manager Stapleton, General Counsel Hentschke, Deputy General Managers Belock and Kerl, Assistant General Manager Cushman, Director of Water Resources Weinberg, Water Resources Manager Yamada, Principal Water Resources Specialist Friehauf and Water Resources Specialist Dobalian.

PUBLIC COMMENT
There was no public comment.

DIRECTORS’ COMMENTS
There were no Directors’ comments.

CHAIR’S REPORT
Chair Dion announced this was his last meeting, and thanked Committee and Board members for participating for the last two years, and expressed appreciation to Vice Chairs Saunders and Price for their support and guidance. Chair Dion also thanked staff for their work and professionalism. He reported that emergency water deliveries of Mexican water would be made to Mexico in the days ahead, based on a recent request and consistent with the Mexico’s Colorado River Water Treaty. He thanked the Otay Water District staff for their efforts. Chair
Dion announced a Special Meeting of the Water Planning Committee would be held January 10, 2013 for the Water Authority’s Master Facilities Plan Update and the Climate Action Plan and Environmental Impact Report. Chair Dion remarked on specific highlights of the 2011-2012 goals and objectives achieved by the Water Planning Committee during the past two years.

I. CONSENT CALENDAR
There were no items for the Consent Calendar.

II. ACTION/DISCUSSION
1. Presentation on water supply and demand conditions.

Ms. Dobalian presented the first report on water supply conditions for the water year, which began October 1, 2012 and would conclude September 30, 2013. Director Pocklington commented that the report supports that supplies were on the decline and demand was increasing based on growing population, adding that Las Vegas and Nevada were building a third intake on Lake Meade for $1 billion. Directors Knutson and Watton added comments on other predictors and management of water supply on the Colorado River.

III. INFORMATION
The following item was received and filed:

IV. CLOSED SESSION
There was not a Closed Session.

V. ADJOURNMENT
On behalf of the Board of Directors, Board Chair Wornham expressed sincere gratitude to Chair Dion for his work on the Board. With no further business, Chair Dion adjourned the meeting at 10:30 a.m.

IMPORTED WATER COMMITTEE
CALL TO ORDER / ROLL CALL
Chair Watton called the Imported Water Committee to order at 10:40 a.m. Committee members present were Vice Chair Arant and Tu, Directors Barnum, Bond, Brady, Knutson, Lewinger, Linden, Madaffer, Steiner, Weston, Wight, and Wilson. Committee member Morrison was absent. Also present were Directors Bailey, Croucher, Dailey, Dion, Douglas, Hilliker, Hogan, Lamb, Miller, Mudd, Pocklington, Price, Saunders, Saxod, Simpson, Smith, Topolovac, Williams, and Wornham. At that time, there was a quorum of the full Board, and the meeting was conducted as a meeting of the Board, however, only committee members participated in the vote.

Staff present included General Manager Stapleton, General Counsel Hentschke, Deputy General Managers Belock and Kerl, Assistant General Manager Cushman, Director of MWD Program Chen, Colorado River Program Director Razak, and others.
ADDITIONS TO AGENDA
There were no additions to the agenda.

PUBLIC COMMENT
There were no public comments.

DIRECTORS’ COMMENTS
There were no comments by Directors.

CHAIR’S REPORT
Chair Watton thanked staff, committee members, and the board for their support to the committee and the Water Authority’s efforts. He announced the final report on Imported Water Committee goals for 2011 and 2012 was available in the board packet.

Director Knutson introduced Tanya Trujillo, Executive Director of the Colorado River Board, at the request of Chair Watton.

I. CONSENT CALENDAR
There were no items on the consent calendar.

II. ACTION/DISCUSSION
1. Metropolitan Water District Issues and Activities update.
   1-A Metropolitan Water District Delegates report.

   The delegates reported on the discussions and actions taken at the recent MWD board meetings.

   1-B Metropolitan Water District’s Purchase Order History.

   Ms. Chen gave a presentation on Metropolitan Water District’s Purchase Order History. Following the presentation, Directors asked questions and made comments.

2. Colorado River Programs.
   2-A Colorado River Board representative’s report.

   There was no Colorado River Board representative’s report.

III. INFORMATION

   This information item was continued to the January 24, 2013 Board meeting.

Ms. Razak provided a presentation on Minute 319 - a binational agreement for managing Colorado River resources.

The following information item was noted and filed:
3. Metropolitan Water District Program report.

Mr. Hentschke took the Committee into closed session at 11:27 a.m.

IV. CLOSED SESSION
1. CLOSED SESSION:
   Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(a)
   Name of Case: QSA Judicial Council Coordination Proceeding No. 4353

   Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(a)
   Name of Case: State Water Resources Control Board (SWRCB) Imperial Irrigation District and San Diego County Water Authority Joint Petition for Modification of Revised Order WRO 2002-0013 (Permit 7643, Application 7482)

2. CLOSED SESSION:
   Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(a) – SDCWA v Metropolitan Water District of Southern California; Case Nos. CPF-10-510830 and CPF-12-512466

   Mr. Hentschke brought the Committee out of Closed Session at 12:08 p.m. and stated the Committee authorized the General Manager, with the concurrence of special counsel, to execute under formal written protest, an extended purchase order with Metropolitan Water District.

V. ADJOURNMENT
There being no further business to come before the Imported Water Committee, Chair Watton adjourned the meeting at 12:09 p.m.

SPECIAL BOARD OF DIRECTORS’ MEETING OF NOVEMBER 29, 2012

1. CALL TO ORDER Chair Wornham called the Special Board of Directors’ meeting to order at 1:00 p.m.

2. SALUTE TO THE FLAG Director Dion led the salute to the flag.

3. ROLL CALL, DETERMINATION OF QUORUM Secretary Hogan called the roll. Directors present were Arant, Bailey, Barnum, Bond, Boyle, Brady, Croucher, Dailey, Dion, Douglas, Hilliker, Hogan, Knutson, Lamb, Lewinger, Linden, Madaffer, Miller, Morrison, Mudd, Pocklington, Price, Saunders,
Saxod, Simpson, Smith, Steiner, Topolovac, Tu, Watton, Weston, Wight, Williams, Wilson, and Wornham. Directors absent were Sanford and Representative Slater-Price.

3-A Report on proxies received. There were no proxies received.

4. **PUBLIC COMMENT**
The following members of the public spoke:

1. Carlos Riva from Poseidon Resources stated he hoped the Board would consider the project favorably.
2. Mayor Jerry Sanders, Mayor city of San Diego, spoke in favor of the project. He listed the many groups in support of the project including Mayors and Council members from the region. He stated it was time to move forward on this historic project.
3. Assemblyman Martin Garrick spoke in favor of the project.
4. Mayor Matt Hall, Mayor of the city of Carlsbad spoke in favor of the project.
5. Councilmember Sherri Lightner spoke in favor of the project.
6. Claude “Bud” Lewis, former Mayor of Carlsbad, and former member of the SDCWA Board of Directors stated “Let’s stop talking about it and build the damn thing.”
7. Lani Lutar from the San Diego County Taxpayers Association spoke in favor of the project. She stated upon review of the Water Purchase Agreement, rate protection for ratepayers and minimized risks were included in the agreement.
8. Paul Webster from the San Diego Regional Chamber of Commerce spoke in favor of the project.
9. Tom Lemmon from the San Diego Building Trades spoke in favor of the project, he stated it would put highly skilled construction workers to work.
10. Marco Gonzalez from the Coastal Environmental Rights Foundation spoke in opposition to the project. He complained about speaking before the presentations were presented. He asked for a 60 day-delay and said the Board should wait for the rate study to be completed before a decision was made.
11. Joni Miringoff from the Flower Fields spoke in favor of the project. She stated they are counting on a new reliable water supply, they and thousands of small farms are counting on this project.
12. Gina McBride from the Carlsbad Chamber of Commerce spoke in support of the project.
13. Shannon Smith from Surfrider spoke in opposition to the project.
14. Stephanie Jungersen from the San Diego North Economic Council spoke in favor of the project.
15. Gus Ayer a resident of Orange County spoke in opposition of the project. He expressed concern about Poseidon Resources and stated they were involved in a smear campaign against a Councilmember.
16. Debbie Cook from Huntington Beach spoke in opposition of the project. She expressed concerns about Poseidon Resources and the history of the Tampa Bay project.
17. Erin Cassidy from Industrial Environmental Association spoke in favor of the project. She stated the project would support hundreds of jobs and reduce the reliance on imported water.
18. Deanna Spehn from the office of State Senator Christine Kehoe read a letter from the Senator that was in support of the project.
19. Lisa Redman from the Aqua Hedionda Lagoon Foundation spoke in favor of the project.
20. Chad Nelson from the Surfrider Foundation spoke in opposition to the project. He expressed concern about the cost overruns, inflation allowances, and environmental concerns.
21. Haley Haggerston from the Surfrider Foundation spoke in opposition to the project.
22. Janelle Riella from the Downtown Partnership spoke in favor of the project. She stated a steady, secure water supply was required for economic growth.
23. Vicky Carson from Surfrider Foundation spoke in opposition to the project. She stated she was a surfer and was concerned about the lobster population. She prefers more focus on conservation.
24. Bret Jones a resident of the city of San Diego spoke in favor of the project. He is concerned about the future water supply of the San Diego region and this project would ensure his children will have safe, clean water for the next 30 years.
25. Bill Riedy from the Maritime Alliance spoke in favor of the project. He stated this project was key to the long-term economic viability of the San Diego Region.
26. Kimberly Thorner General Manager from the Olivenhain Municipal Water District spoke in favor of the project. She stated this would be the first truly reliable water supply in the region. She stated this decision was for the generations to come.
27. Rick Mansur from the Carlsbad Sheraton Hotel spoke in support of the project. He stated without water you won’t have tourism.
28. Chris Garrett with Latham & Watkins the permitting and compliance attorney with Poseidon spoke. He responded to a letter the opponents had sent to the Board of Directors the prior day.
29. Conner Everts from the Desal Response Group spoke in opposition to the project. He stated conservation would do enough. He stated it is speculative that desalinated water would be reliable.
30. Clark Dawson from the EverFlow Resources Inc. spoke in favor of the project.
31. Mahgum Asqarian a North Park resident spoke in opposition to the project.
32. Roger Kube from the Surfrider Foundation spoke in opposition to the project.
33. Tom Kunde from the International Brotherhood of the Electrical Workers 589 spoke in favor of the project. He stated this project would create hundreds of new jobs.
34. Angela Howe, Legal Director, Surfrider Foundation spoke against the project. She stated the Surfrider Foundation challenged the Water Board’s permit on this project specific to the site design and technology. She stated there had yet to be a ruling, but it was expected within 90 days.
35. Stefanie Seicich-Quinn from the Surfrider Foundation spoke in opposition to the project. Her concern was regarding rates and the rate study not being completed.
36. David Vincent a San Diego citizen spoke in opposition to the project.
37. Jim Peugh a citizen of San Diego spoke in opposition to the project, and stated the decision should not be made until after the rate study was completed.
38. Jerry Boyd from the Surfrider Foundation spoke in opposition to the project, he stated a good portion of the people in the room would be dead before this contract would expire.
39. Sandy Naranjo from the San Diego & Imperial Counties Labor Council spoke in favor of the project. She stated the project would have a positive economic impact on the region.
40. Steven Greenweld a citizen from San Diego stated the project would be a disaster. Due to terrorism and a tsunami raising the water level, this was not the place for it, and saltwater has nuclear material in it. The interest alone would be two billion dollars, not to mention the salaries and pensions of Poseidon which we have no control of. The answer is to have a pipeline from Quebec to bring water to us.
41. Nick Doenges a law student and a resident of the city of San Diego spoke against the project. He spoke in favor of recycling and conservation.
42. Jill Witkowski with the San Diego Coastkeeper spoke in opposition of the project.
43. Kerry Winterson from the Surfrider Foundation spoke in opposition of the project.
44. Matt Kriz from the International Union of Painters and Allied Trades spoke in favor of the project. He stated it would create thousands of jobs and provide a reliable supply of water in San Diego County.
45. Julia Chunn-Heer from the Surfrider Foundation spoke in opposition to the project.
46. Joe Geever from the Surfrider Foundation spoke in opposition to the project. He stated the vote should be postponed until the cost of service study was completed.
47. Livia Borak from the Coastal Environmental Rights Foundation spoke in opposition to the project.
48. Sara Kent from the Coastal Environmental Rights Foundation spoke in opposition to the project. She expressed concern about the ratepayers.
49. Michael Hunsaker from the Property Owner Defense League spoke in favor of the project.
50. Michael Witek from the Teamsters Local 36 spoke in favor of the project. He also is an Avocado grower that lives in Fallbrook. He stated we need the jobs this project will provide and a reliable source of water.
51. Johnny Swanson from Ironworkers 229 spoke in favor of the project. He stated it would provide jobs and reliable water for the region.

5. **CONSENT CALENDAR**

There were no items under the Consent Calendar.
6. **ACTION/DISCUSSION**

1. **Carlsbad Desalination Project.**
   
   1-A **Report on agency participation in Uniform Contract for Member Agency Purchase of Treated Water from the Water Authority-Carlsbad Desalination Project.**
   
   Ms. Friehauf presented on the purpose of the purchase contract. She stated it would provide member agencies an opportunity to purchase a local supply directly from the Water Authority. This would be a local drought-proof supply that would provide additional reliability and diversify the agency’s portfolio. It would also provide an opportunity for the Water Authority to sell a local supply to the member agency at full cost, providing a fixed revenue stream and reducing the amount of project costs that need to be recovered through the Water Authority rates and charges. She stated two member agencies had committed to purchase Carlsbad Desalination project supplies from the Water Authority: Carlsbad Municipal Water District and the Vallecitos Water District. The next steps were staff would develop individual contracts for each agency and the Board would consider approval of the individual contracts.

   1-B **Direct the General Manager to refer nine Carlsbad Desalination Rate Structure Alternatives to the Cost of Service Consultant and return to the Board with a recommended alternative to allocate the cost of the Carlsbad Desalination Project costs.**
   
   Staff recommendation: Approve the submission of nine requested Carlsbad Desalination Rate Structure Alternatives to the Cost of Service Consultant.

   Ms. McCraner presented on the rate structure alternatives for the Carlsbad Desalination Project. She reviewed the history of the process, stated a total of nine alternatives had been proposed and described the Cost of Service collaborative process.

   Director Mudd moved and Director Boyle seconded the staff recommendation.

   Director Mudd wanted the following statement entered into the written record: “I support the staff recommendation as written, but wish to speak to the Cost of Service Study process. At this morning’s Administrative and Finance Committee meeting, the City-10 recommended augmenting the scope of the Cost of Service Study consultant agreement to assure that all agencies are able to fully engage in a robust discussion of the rate structure alternatives. We wish to affirm this intent once again by requesting that the meeting minutes reflect the following statement:”

   “The Board supports a Cost of Service Study process that promotes robust member agency engagement in the review of assumptions and development of a proposed rate structure alternative. It is the Board’s expectation that sufficient resources and funds will be available to support this goal.”
The nine alternatives represent six months of work product from all of our agencies. It will be helpful that the Cost of Service Study Consultant has the benefit of the Board’s discussions to date.

It is true that one of the nine alternatives being forwarded to the Cost of Service Consultant, one was submitted by the City of San Diego. However, I would like to be clear that the City of San Diego remains open-minded and is committed to participating in the Cost of Service Study process which will achieve a fair and equitable rate structure...Including the possibility of a rate structure which may not be any of the nine options originally presented.”

End of statement by Director Mudd.

Director Lewinger stated of the nine alternatives reviewed, he wanted to clarify the consultant was not limited to those nine alternatives. He asked Director Mudd to clarify and Director Mudd stated yes that was correct.

Director Arant stated the original four alternatives were very reasonable for his agency (Valley Center MWD) and the ones that caused concern were the ones submitted by the city of San Diego, which essentially doubled the cost for his agency.

Director Wilson expressed concern about the city of San Diego’s preferred option, suggesting it would cost his agency an extra one million dollars per year, he suggested removing the city of San Diego’s preferred option reducing the amount to eight alternatives. Director Mudd responded there were nine alternatives and a Cost of Service Study Consultant would look at all the options.

Director Watton stated he supported the option to put all the alternatives on the table and then the fight is on.

Director Steiner stated all alternatives were equal. None were “preferred”. The Board would engage in the process, make the policy decisions, everyone was committed, whatever the Cost of Service Study determines, that is what the Board would deal with.

Director Arant asked Director Mudd if the full administrative record, including the full comment and discussion of the meeting would be forwarded to the Cost of Service Consultant. Director Mudd responded yes, that would be happening.

Director Pocklington stated he would support the motion. He declared this was a San Diego County project, and he hoped the cost would be uniform and fair to everybody.

Director Madaffer stated this would be an open process, as discussed in the Administrative and Finance Committee, which every member throughout the entire region would be a part of.

Director Croucher stated the process should be “nonpolitical.”
Director Arant stated he seldom read the Water Authority minutes, but he hoped that all the comments would be captured and recorded regarding the discussion. Chair Wornham replied the entire audio would be included in the minutes.

Director Wilson stated he would support the motion, he had initially planned to vote against it, but after Director Steiner’s comments, he felt the city’s option was not “preferred” but just another option.

Director Topolovac asked if the General Managers and Finance Managers of the member agencies would be included in the process and Chair Wornham stated they would.

The Board voted on the following modified motion as modified by Director Mudd and seconded by Director Boyle:

1-B Direct the General Manager to refer nine Carlsbad Desalination Rate Structure Alternatives to the Cost of Service Consultant and return to the Board with a recommended alternative to allocate the cost of the Carlsbad Desalination Project costs. The Board approved the submission of nine requested Carlsbad Desalination Rate Structure Alternatives to the Cost of Service Consultant. The Board supported a Cost of Service Study process that promotes robust member agency engagement in the review of assumptions and development of a preferred rate structure alternative. It is the Board’s expectation that sufficient resources and funds would be made available to support this goal.

The vote passed with 95.89% of the Board voting yes, and 4.11% absent.

1-C Adopt resolution approving:

- The Water Purchase Agreement with Poseidon Resources (Channelside LP);
- The Design-Build Agreement for Pipeline Improvements with Poseidon Resources (Channelside LP);
- Agreements necessary to accomplish tax exempt project financing through the California Pollution Control Financing Authority;
- Adjustments to the Capital Improvement Program Budget;
- Supporting contracts and contract amendments;
- The Second Addendum to the City of Carlsbad Precise Development Plan and Desalination Project Environmental Impact Report (State Clearinghouse no. 2004041081) and a mitigation monitoring and reporting program;
- Other actions necessary for implementation of the Carlsbad Desalination Project.

Staff recommendation:
Adopt Resolution No. 2012-__ a resolution of the Board of Directors of the San Diego County Water Authority approving a Water Purchase Agreement and a Design-Build Agreement for pipeline improvements with Poseidon Resources, Channelside LP; approving an installment sale and assignment agreement with the San Diego County Water Authority Financing Agency and other agreements
necessary to accomplish tax exempt project financing through the California Pollution Control Financing Authority; approving adjustments to the Capital Improvement Program Budget; approving supporting contracts and contract amendments; approving the Second Addendum to the City of Carlsbad Precise Development Plan and Desalination Project Environmental Impact Report (State Clearing House no. 2004041081); adopting a mitigation monitoring and reporting program; authorizing the filing of a Notice of Determination; and authorizing the General Manager and General Counsel to execute agreements and take other actions necessary for implementation of the Carlsbad Desalination Project.

Ms. Stapleton began the presentation by reviewing the public deliberation process and the member agency presentations. Mr. Weinberg reviewed the details of the Water Purchase Agreement, and the Design Build Agreement. Ms. Kerl reviewed the Tax-Exempt Financing documents, the Capital Improvement Program Budget Adjustment, and the Supporting contracts and contract amendments. Mr. Purcell reviewed the Second Addendum to the Carlsbad Desalination Project Environmental Impact Report and Mitigation Monitoring and Reporting Program.

Director Arant moved, Director Smith seconded to approve the staff recommendation.

Director Mudd asked if Poseidon failed to produce or provide water per the contract provisions, which agency was responsible for the debt service costs associated with the project pipeline, Poseidon or the Water Authority? Ms. Stapleton responded Poseidon was responsible.

Director Pocklington stated he had been on the Board over 15 years, he thanked staff for their hard work, and he expressed support for the project. He stated there are problems with the Colorado River and stated this was the way to go.

Director Dion stated staff had done a good job. He said the train had not left the station. He stated his agency was concerned about energy costs. He said “Are we trading MWD for SDG&E?” His agency felt this project was too expensive. The debt obligation was driving the water rate increases and would not peak until 2016. This project would become a first obligation to his agency; his district would not grow in water demand in the future. With that, he stated his Board had directed him to cast a no vote on the Water Purchase Agreement.

Director Weston expressed his support for the project.

Director Brady stated it came down to cost, contribution and reliability. He stated in terms of cost it was three times the cost of what we pay from water from MWD. In terms of reliability, he stated we would spend a billion dollars to have a 1 – 3% increase in reliability. He predicted the monthly increase in water bills for residential customers would not be $5 - $7 per month, but $10 – 20 per month. For the avocado grower, the increase would be $600 per acre annually. He stated it might be a great project ten years from now, but it was premature, and he would be voting no.
Director Lewinger thanked the public for the issues they brought up. He assured them, the Board had been listening. He added the way the agreement was structured, the risk was limited.

Director Watton stated Otay fully supports desalination and a diversified water supply. He expressed concern regarding the structure of the deal, that the Water Authority would eventually buy out the plant, and that it was not truly a “private” deal. He stated desalination would add $16 per month on an average household by 2017. When other increases are added into that, the total would be an increase of $24 per month, or an increase of 34%. He stated for the record that for the most part he agreed with Dr. Brady’s analysis. He announced he would be voting no.

Director Madaffer stated he wanted to get some issues on the record about the Preliminary Limited Offering Memorandum and asked who were the individuals responsible for putting the document together. Ms. Stapleton responded: Mr. Hentschke, Ms. Kerl, Ms. McCraner, Dr. Moore, and Mr. Jamison Feheley of JP Morgan, Senior Underwriter for the Carlsbad desalination bonds and Managing Partner of the firm. Director Madaffer asked the following questions:

1. Have you read the Preliminary Official Statement and Official Statement in their entirety?

   The entire group listed above responded yes. Ms. Kerl replied the offering document was called a Preliminary Limited Offering Memorandum (“PLOM”).

2. Describe how the Preliminary Limited Offering Memorandum was prepared?

   Ms. Kerl replied Drinker Biddle & Reath LLP (Underwriter’s Counsel) drafted the PLOM and it was distributed to all. (Water Authority staff, Poseidon, Bond Counsel, Underwriter’s, and California Pollution Control Financing Authority). Comments received were incorporated by the underwriter’s counsel and a red-line was sent to all for review and comment. A page by page review of the entire document was conducted. This iterative process continued until all parties acknowledged acceptance of the document.

3. Who authored each section?

   Ms. Kerl responded, with the exception of the Appendix D which was the Water Authority disclosure and included the FY 2012 audited CAFR the Underwriter’s Counsel drafted the document.

4. Are there particular sections that you authored?

   Ms. Kerl replied she authored Appendix D which was the Water Authority disclosure and included the FY 2012 audited CAFR.
5. How was it disseminated for review?

Ms. Kerl replied the CAFR was on the Board’s agenda that day for approval and had been approved by the Audit Committee.

6. Has all of the material information concerning the value of the bonds, and our ability to repay the bonds, been accurately and completely disclosed in the Preliminary Limited Offering Memorandum?

Ms. Kerl responded yes.

7. Is there any information in the Preliminary Limited Offering Memorandum that you feel is inaccurate or somehow misleading?

Ms. Kerl replied no.

8. Has any information material to the value of the bonds or the ability to repay the bonds been excluded?

Ms. Kerl replied no.

9. Has anyone expressed any concerns to you that information in the Preliminary Limited Offering Memorandum is inaccurate or misleading, or that some information that should have been included has been excluded?

Ms. Kerl replied no.

10. Have outside professionals (e.g., lawyers, accountants, actuaries and auditors) reviewed it?

Ms. Kerl responded yes: In addition to General Counsel, other attorney’s including Project Attorneys, Bond Attorneys, Underwriter’s Counsel, California Pollution Control Financing Authority Attorneys, Attorney General’s Office and Poseidon’s Attorney. Also including other professionals: Underwriter’s, Independent Engineers, professional Model Auditor for the pro-forma financial model; professional Insurance Consultant for the insurance provisions. In addition, the Water Authority’s outside auditor would review certain Water Authority financial areas in Appendix D and the CAFR was attached.

11. Did they provide any comments or proposed changes?

Ms. Kerl responded yes.

12. Were those comments or changes incorporated into the draft?
Ms. Kerl responded yes.

13. Would you change or add anything to the Preliminary Limited Offering Memorandum?

Ms. Kerl replied no.

14. To the best of your knowledge, are the financial statements contained in the Preliminary Limited Offering Memorandum correct and prepared consistent with the appropriate accounting standards?

Ms. Kerl replied yes.

15. Have you signed a certification regarding the accuracy and completeness of the Preliminary Limited Offering Memorandum?

Ms. Kerl replied all parties have provided, in writing, their acceptance of the Preliminary Limited Offering Memorandum. Prior to its issuance, all parties would provide certification of accuracy and completeness.

16. Is there anything else I should know about the Preliminary Limited Offering Memorandum and the representations contained in it before I vote?

Ms. Kerl replied no.

Director Madaffer stated the importance of the project for our quality of life. He stated we can’t conserve water that we do not have. He had heard and read that was a project we can’t afford, but he thinks this was a project we couldn’t afford not to have.

Director Dailey stated when she became a Board member she was instructed to think regionally. Our mission remains to provide a safe, reliable supply of water. She stated if they went against the project, they were going against their own policy. She stated her city had voted to support the Water Purchase Agreement. She stated if they didn’t move ahead they were doing a disservice to their citizens.

Director Price read a letter into the record from the city of Del Mar in support of the project.

Director Douglas stated conservation had already been done and would continue to happen. The city of Çarlsbad was investing an additional $30 million dollars in recycled water. She expressed support for desalination and the need for a holistic approach. She added everyone has a need for reliable water for the future.

Director Topolovac expressed support for the project.
Director Lamb stated his support for the project.

Director Croucher thanked the public for being respectful. He reminded the Board that the Cost of Service Study had not been done, which was a major concern for Otay.

Director Saunders also thanked the public for coming out to speak. He reminded the Board that just two years ago we were in strict allocations from the Metropolitan Water District. He stated the Desalination Plant would project our economy and our quality of life. He said between 2020 and 2030 it was estimated the price of desalinated water would be less than the cost of water from the Metropolitan Water District.

At that time Chair Wornham reminded the Board of the motion that had been made.

Director Arant moved, Director Smith seconded to approve the staff recommendation, and the motion carried at 85.11% of the vote. 10.78% voted no. 4.11% was absent. The following Board members voted no: Barnum, Brady, Croucher, Dion, and Watton.

Chair Watton thanked staff for their hard work on the project. He thanked the outside experts and consultants. Director Hogan thanked the Carlsbad Desalination Project Advisory Group: Directors Arant, Dion, Saunders, and Wornham.

7. INFORMATION
There were no items under Information.

8. CLOSED SESSION
1. CLOSED SESSION:
   Conference with Real Property Negotiator
   Government Code §54956.8
   Property: Carlsbad Desalination Plant including land, estates or interests in land, easements, and fixtures of Poseidon Resources (Channelside) LP
   Agency Negotiators: Sandra Kerl, Ken Weinberg, David Moore, Eric Petersen
   Negotiating Parties: Poseidon Resources (Channelside) LP
   Under Negotiation: Price and terms of payment, including timing of acquisition and price and payment options.

Mr. Hentschke announced there was no need for a Closed Session.

9. ADJOURNMENT
There being no further business to come before the Board, Chair Wornham adjourned the Special Board meeting at 5:00 p.m.
1. **CALL TO ORDER** Chair Wornham called the Formal Board of Directors’ meeting to order at 5:01 p.m.

2. **SALUTE TO THE FLAG** This took place during the Special Board meeting.

3. **ROLL CALL, DETERMINATION OF QUORUM**
   Secretary Hogan called the roll. Directors present were Arant, Bailey, Barnum, Bond, Boyle, Brady, Croucher, Dailey, Dion, Douglas, Hilliker, Hogan, Knutson, Lamb, Lewinger, Linden, Madaffer, Miller, Morrison, Mudd, Pocklington, Price, Saunders, Saxod, Simpson, Smith, Steiner, Topolovac, Tu, Watton, Weston, Wight, Williams, Wilson, and Wornham. Directors absent were Sanford and Representative Slater-Price.

   3-A Report on proxies received. There were no proxies that had been filed.

4. **ADDITIONS TO AGENDA** There were no additions to the agenda.

5. **APPROVAL OF MINUTES** Director Tu moved, Director Price seconded, and the motion carried at 95.89% of the vote to approve the minutes of the Special Board of Directors’ meeting of October 11, 2012 and the Formal Board of Directors’ meeting of October 25, 2012.

6. **OPPORTUNITY FOR MEMBERS OF THE PUBLIC WHO WISH TO ADDRESS THE BOARD ON MATTERS WITHIN THE BOARD’S JURISDICTION**
   There were no members of the public that wished to speak.

7. **PRESENTATIONS AND PUBLIC HEARINGS**
   7-C Recognition of Jeff Stephenson, Principal Water Resources Specialist, Employee of the 1st Quarter.

   Chair Wornham announced Director Madaffer had been appointed to the Board of Directors, Director Wight had been reappointed and Jeff Stephenson was recognized as Employee of the 1st Quarter.

8. **REPORTS BY CHAIRS**
   8-A Chairs report: Chair Wornham. No report was given.
   8-B Report by Committee Chairs.
   Administrative and Finance Committee. Director Wight reviewed the meeting and the actions taken.
Engineering and Operations Committee. Director Knutson reviewed the meeting and the single action taken.
Legislation, Conservation and Outreach Committee. Director Saxod reviewed the meeting and the actions taken.
Water Planning Committee. Director Dion reviewed the meeting and stated no action was taken.
Imported Water Committee. Director Watton stated the only item on the agenda was a Closed Session.

9. CONSENT CALENDAR
Director Tu moved, Director Weston seconded, and the motion carried at 95.89% of the vote to approve the consent calendar. Directors voting no or abstaining are listed under the item number.

9-1. Treasurer’s report.
The Board noted and filed the monthly Treasurer’s report.

9-2. Vote Entitlement Resolution for Calendar Year 2013.
The Board adopted Resolution No. 2012-17 establishing the vote and representative entitlements of each member agency effective January 1, 2013.

9-3. Fiscal Years 2012 and 2013 additional litigation expenses.
The Board amended the General Counsel’s Fiscal Year 2012 and 2013 Department Budget by an amount not-to-exceed $3.5 million for additional litigation expenses.

9-4. Amendment to Professional services contract with Mercer Health and Benefits, LLC, to increase the amount by $150,000 and extend the term by 30 months for providing Health Insurance Broker Services.
The Board authorized the execution of an amendment in the amount of $150,000, for a total contract amount not-to-exceed $300,000 and extended the term by 30 months.

9-5. Annual Statement of Investment Policy and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2013.
The Board adopted the Annual Statement of Investment Policy and continued to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2013.

9-6. Professional services contract with Carollo Engineers Inc. for a Cost of Service Study.
The Board authorized the General Manager to award a professional services contract to Carollo Engineers Inc. for an amount not-to-exceed $106,000 for a cost of service study. The Board directed the General Manager to add scope and funding to the contract sufficient to allow robust member agency participation including (Board of Directors, General Managers and Finance Officers) in the review of assumptions and development of a preferred rate structure alternative.
The Board authorized the General Manager to accept the Lake Hodges project as complete and recorded the Notices of Completion for the Archer Western and Andritz contracts.

The Board adopted the proposed 2013 Legislative Policy Guidelines.

The Board Sponsored legislation that: Moves augmentation of raw water supplies with advanced treated purified water and direct potable reuse to the Health and Safety Code, instead of defining it as a waste in the Water Code. Requires the California Air Resources Board to develop a program that returns revenues from the purchase of greenhouse gas emission permits by the Metropolitan Water District to retail water agencies that purchase MWD water.

9- 10. Amend agreements with Carpi & Clay, Sacramento; Lang, Hansen, O’Malley and Miller; V. John White Associates; and Carpi, Clay & Smith, Washington D.C., for legislative advocacy and government relations services.
The Board amended the agreements for legislative advocacy services through December 31, 2014, for a period of 24 additional months, for Carpi & Clay; Lang, Hansen, O’Malley and Miller; V. John White Associates; and Carpi, Clay & Smith, increasing total funding for the four agreements by $1,016,256, to an amount not-to-exceed $2,970,739.

10. ACTION/DISCUSSION

Audit Committee Annual Report.
Audit Committee recommendation:
1. Accept and file the Audit Committee Annual Report pursuant to the Administrative Code, Section 2.00.066.

Director Steiner moved, Director Saxod seconded, and the motion carried at 95.89% of the vote to approve the Audit Committee recommendation.

11. CLOSED SESSION(S)

11-A CLOSED SESSIONS:
Conference with Legal Counsel – Existing Litigation
Government Code §54956.9(a)
Name of Case: QSA Judicial Council Coordination Proceeding No. 4353
Conference with Legal Counsel - Existing Litigation
Government Code §54956.9(a)
Name of Case: State Water Resources Control Board (SWRCB)
Imperial Irrigation District and San Diego County Water Authority
Joint Petition for Modification of Revised Order WRO 2002-0013
(Permit 7643, Application 7482)

11-B CLOSED SESSION:
Conference with Legal Counsel - Existing Litigation
Government Code §54956.9(a)
SDCWA v Metropolitan Water District of Southern California;
Case Nos. CPF-10-510830 and CPF-12-512466

Mr. Hentschke announced there was no need for a Closed Session, however the Board needed to vote on the Imported Water Committee recommendation.

12. ACTION FOLLOWING CLOSED SESSION

CLOSED SESSION: The Board authorized the General Manager, with the concurrence of special counsel, to execute, under formal written protest, an extended purchase order with Metropolitan Water District.

Director Steiner moved, Director Lamb seconded and the motion carried at 95.89% of the vote.

13. SPECIAL REPORTS
13-A GENERAL MANAGER’S REPORT – No report was given.
13-B GENERAL COUNSEL’S REPORT – No report was given.
13-C SANDAG REPORT – Director Saunders – No report was given.
   SANDAG BORDERS/REGIONAL PLANNING COMMITTEE – Director Saxod announced there was nothing to report.
13-D AB 1234 COMPLIANCE REPORTS – No reports were given.

14. OTHER COMMUNICATIONS - Director Steiner thanked Director Smith for his service and wished everyone Happy Holidays. Chair Wornham also thanked Director Smith and said he would be honored at the January 24, 2013 Board meeting. Director Linden also gave tribute to Director Smith.
15. **ADJOURNMENT**

There being no further business to come before the Board, Chair Wornham adjourned the meeting at 5:20 p.m.

__________________________________  _______________________________
Thomas V. Wornham, Chair    Michael T Hogan, Secretary

_______________________________
Doria F. Lore, Clerk of the Board
RESOLUTION NO. 2013-____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SAN DIEGO COUNTY WATER AUTHORITY
HONORING RICHARD SMITH
UPON HIS RETIREMENT FROM THE BOARD OF DIRECTORS

WHEREAS, Richard Smith served as a member of the Board of Directors of the San Diego County Water Authority, representing Helix Water District, from January 8, 2007 to his retirement on January 10, 2013; and

WHEREAS, he served as Secretary and Vice Chair on the San Diego County Water Authority Board; and

WHEREAS, he served as Vice Chair on the Engineering and Operations Committee, and as a member on the Administrative and Finance Committee, and Engineering and Operations Committee; and

WHEREAS, he served as a member on the Conservation AD HOC Committee; and

WHEREAS, his contributions to the community extend beyond the activities with the San Diego County Water Authority; and

WHEREAS, his service, both public and private, has resulted in benefit to all people of San Diego County.

NOW, THEREFORE, BE IT RESOLVED, that on behalf of its individual members, past and present, its staff, and the people of San Diego County, the Board of Directors offers its most sincere appreciation to Richard Smith for his dedicated service to the San Diego region.

PASSED, APPROVED, and ADOPTED this 24th day of January, 2013.

Ayes:

Noes:

Abstain:
Absent:

_______________________________
Thomas V. Wornham,
Chair

ATTEST:

____________________________________
Michael T. Hogan,
Secretary

I, Doria F. Lore, Clerk of the Board of the San Diego County Water Authority, certify that the vote shown above is correct and this Resolution No. 2013- _____ was duly adopted at the meeting of the Board of Directors on the date stated above.

____________________________________
Doria F. Lore
Clerk of the Board
DATE: January 16, 2013
TO: Board of Directors
FROM: Daniel S. Hentschke, General Counsel
RE: Credentials of DeAna Verbeke
Helix Water District

Transmitted herewith is a copy of Resolution No. 12-67 submitted by the Helix Water District appointing DeAna Verbeke to the Water Authority’s Board of Directors. Her term will expire on August 18, 2013.

The credentials furnished are sufficient for the qualifications of Ms. Verbeke as a member of the Water Authority Board.

[Signature]
Daniel S. Hentschke
General Counsel

dfl
Attachment
RESOLUTION NO. 12-67 OF THE BOARD OF DIRECTORS OF HELIX WATER DISTRICT APPOINTING DE ANA VERBEKE AS ITS REPRESENTATIVE ON THE BOARD OF DIRECTORS OF THE SAN DIEGO COUNTY WATER AUTHORITY FOR A TERM FROM DECEMBER 19, 2012 TO AUGUST 18, 2013

WHEREAS, Helix Water District is a member of the SAN DIEGO COUNTY WATER AUTHORITY and is entitled to two representatives to serve as members of the Board of Directors of the SAN DIEGO COUNTY WATER AUTHORITY; and

WHEREAS, the Board of Directors adopted Resolution No. 07-39 appointing Richard K. Smith to serve as one of the District’s representatives on the Board of Directors of the SAN DIEGO COUNTY WATER AUTHORITY; and


NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Helix Water District as follows:

SECTION 1: The President of the Board, with the approval and acquiescence of the Board of Directors, does hereby appoint DeAna Verbeke as a member of the Board of Directors of the SAN DIEGO COUNTY WATER AUTHORITY as a representative of this District on said Board for the term December 19, 2012 through August 18, 2013.

SECTION 2. The Secretary is hereby authorized and directed to provide a certified copy of this resolution to the SAN DIEGO COUNTY WATER AUTHORITY.

PASSED, ADOPTED AND APPROVED this 19th day of December 2012, by the following vote:

AYES: Directors Muse, Verbeke, Linden, Hedberg, and Scalzitti

NOES: None

ABSENT: None

Attest:

[Signature]
Secretary

[Signature]
President
RESOLUTION NO. 2013-______

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SAN DIEGO COUNTY WATER AUTHORITY
HONORING JAMES H. BOND
UPON HIS RETIREMENT FROM THE BOARD OF DIRECTORS

WHEREAS, James Bond served as a member of the Board of Directors of the San Diego County Water Authority, representing San Dieguito Water District, from March 11, 1993 to his retirement on January 10, 2013; and

WHEREAS, he served as Chair and Vice Chair on the San Diego County Water Authority Board; and

WHEREAS, he served as Chair on the Audit Committee, and as Vice Chair on the Administrative and Finance Committee, and Executive Committee, and as Secretary on the Executive Committee; and

WHEREAS, he served as a member on the Administrative and Finance Committee, Engineering and Operations Committee, Fiscal Policy Committee, Imported Water Committee, Legislation Conservation and Outreach Committee, Planning and Environmental Committee, Public Affairs Committee, and Water Policy Committee; and

WHEREAS, he served as Chair on the AD HOC Committee on Storage and Treated Water, and as a member on the AD HOC Board Liason Committee for Binational Relations, AD HOC Committee on Binational Activities, AD HOC MWD Budget Review Committee, Board Representation AD HOC Committee, Chairman’s Water Advisory Committee, Quantification Settlement Agreement Implementation AD HOC Committee, Rate Study Subcommittee, and Special Budget Committee; and

WHEREAS, he served as representative and alternate on the Colorado River Board, and as a representative on the Border Water Council, SANDAG Borders Committee, and SANDAG Regional Planning Committee; and
WHEREAS, his contributions to the community extend beyond the activities with the San Diego County Water Authority; and

WHEREAS, his service, both public and private, has resulted in a benefit to all people of San Diego County.

NOW, THEREFORE, BE IT RESOLVED, that on behalf of its individual members, past and present, its staff, and the people of San Diego County, the Board of Directors offers its most sincere appreciation to James H. Bond for his dedicated service to the San Diego region.

PASSED, APPROVED, and ADOPTED this 24th day of January, 2013.

Ayes:
Noes:
Abstain:
Absent:

_____________________________
Thomas V. Wornham,
Chair

ATTEST:

_____________________________
Michael T. Hogan,
Secretary

I, Doria F. Lore, Clerk of the Board of the San Diego County Water Authority, certify that the vote shown above is correct and this Resolution No. 2013- ______ was duly adopted at the meeting of the Board of Directors on the date stated above.

_____________________________
Doria F. Lore
Clerk of the Board
DATE: January 16, 2013
TO: Board of Directors
FROM: Daniel S. Hentschke, General Counsel
RE: Credentials of Mark Muir
San Dieguito Water District

Transmitted herewith is a letter submitted by the San Dieguito Water District appointing Mark Muir to the Water Authority’s Board of Directors. His term will expire on December 21, 2014.

The credentials furnished are sufficient for the qualifications of Mr. Muir as a member of the Water Authority Board.

[Signature]
Daniel S. Hentschke
General Counsel

dfl
Attachment
January 3, 2013

Chairman Thomas Wormham
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

RE: San Dieguito Water District’s Appointment to the San Diego County Water Authority Board

Dear Chairman Wormham:

San Dieguito Water District Board member Mr. Mark Muir has been appointed to serve on the San Diego County Water Authority Board on behalf of San Dieguito Water District. Board member Muir will be replacing Mr. James Bond as the San Dieguito Water District representative effective January 2013. Former Board member James Bond, who has faithfully served on the San Dieguito Water District Board and Encinitas City Council for 20 years, has retired effective December 12, 2012.

Please make arrangements to install Board member Muir on the San Diego County Water Authority Board at the earliest convenience.

Sincerely,

Lisa Shaffer,
San Dieguito Water District Board President

c: Doria Lore, SDCWA
San Dieguito Water District Board
SDWD Interim General Manager Bill O’Donnell
DATE: January 16, 2013
TO: Board of Directors
FROM: Daniel S. Hentschke, General Counsel
RE: Credentials of Frank Hilliker
Lakeside Water District

Transmitted herewith is a letter submitted by the Lakeside Water District reappointing Frank Hilliker to the Water Authority’s Board of Directors. His term will expire on January 8, 2019.

The credentials furnished are sufficient for reappointment of Mr. Hilliker on the Water Authority Board.

Daniel S. Hentschke
General Counsel

dfl
Attachment
January 11, 2013

Doria F. Lore
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Re: Lakeside Water District Representative Appointment

Dear Ms. Lore,

The Lakeside Water District has designated and appointed Frank Hilliker to continue to serve as our representative to the Board of Directors of the San Diego County Water Authority. Director Hilliker’s term shall commence on January 8, 2013 and end on January 8, 2019.

Director Hilliker’s appointment was passed and adopted at a regular meeting of the Board of Directors of the Lakeside Water District held on January 8, 2013 by the following vote:

   AYES: Directors Robertson, Johnson, Hilliker, Neumeister, Jenkins
   NOES: None
   ABSENT: None
   ABSTAIN: None

If you should have any questions please call me at 619-443-3805.

Sincerely,

Brett Sanders,
General Manager/Board Secretary
MEMORANDUM

DATE: January 16, 2013

TO: Board of Directors

FROM: Doria F. Lore, Clerk of the Board

SUBJECT: Nominations for Vice Chair

A memorandum was e-mailed to you dated December 20, 2012 regarding Richard Smith leaving the Board. With Director Smith’s departure, the office of Vice Chair became vacant and it was announced a special election would be conducted to fill this vacancy. Board members were allowed to nominate one nominee for the Vice Chair position. Written nominations were due by Thursday, January 10, 2013 to the Clerk of the Board. At the January 24, 2013 Board meeting, the nominations for Vice-Chair will be announced and additional nominations may be taken from the floor. The vote will then be taken at that same meeting.

The written nominations received are as follows:

Vice Chair: Mark Weston
Nominated by: Gary Arant
Seconded by: Keith Lewinger

Additional nominations may now be taken from the floor at the January 24, 2013 Board meeting. Nominations will be closed after this date.

If you have any questions, please call me at 858-522-6614.
BOARD VICE-CHAIR — NOMINATION FORM

Use this form to submit nominations for Board Vice-Chair for the term of office from January 24, 2013 – September 30, 2014. Each nomination must be seconded by a Director of another member agency. Nominees must give their approval prior to submission of the nomination.

CANDIDATE FOR VICE CHAIR: Mark Weston

NOMINATION BY: Gay Arant
Name
Signature

SECOND BY: Keith Lewinger
Name
Signature

Forms must be received by the Clerk of the Board by Thursday, January 10, 2013. Forms may be faxed to 858 (522-6567).
December 27, 2012

Thomas V. Wornham, Chairman
San Diego County Water Authority Board of Directors
4677 Overland Avenue
San Diego, CA 92123

Dear Chairman Wornham:

As Mayor of the City of Poway, I strongly support the nomination of Mark Weston as SDCWA Vice Chairman.

Mr. Weston represents the City of Poway on the SDCWA Board and has an outstanding list of accomplishments related to water issues in the San Diego Region. Mr. Weston has over 40 years of experience in the water, wastewater, and municipal engineering profession, with 25 of those years in San Diego. He has served executive leadership positions in Cities and Water Districts, as well as professional associations including APWA and AOWA. He has a strong grasp of water policy and infrastructure issues facing our water suppliers. He is well respected by water and municipal officials throughout the region and has demonstrated the ability to get the job done by building coalitions and finding consensus.

I have personally known Mark for 25 years and know that he will provide sound leadership at the Water Authority as its Vice Chairman. If you have specific questions, I will be happy to provide you with more information. I can be reached at 858-668-4520 or dhigginsn@poway.org.

Very truly yours,

Don Higginson
Mayor
January 16, 2013

Attention: Board of Directors

From: Thomas V. Wornham, Chair

Recommendation for Appointment of Director Michael T. Hogan as the Representative and Director Bud Pocklington as the Alternate Representative to the Colorado River Board of California (Action)

Background
California Water Code Section 12512 provides the statutory method of nominating and appointing Colorado River Board representatives and alternates. It requires the Board of Directors to submit a recommendation to the Governor for the appointment of a representative and an alternate representative to the Colorado River Board if vacancies arise. The list must also contain at least two other names with a recommendation as to whom should be appointed from the list. The Governor then appoints the Water Authority’s representative and alternative representative from the designated list, or if he fails to act within 60 days following submission of the list, those directors recommended by the Board shall be deemed appointed.

Discussion
Bill Knutson resigned from the Water Authority Board of Directors, effective January 2, 2013. Director Knutson was the Water Authority’s representative to the Colorado River Board and his resignation created a vacancy.

James Bond resigned from the Water Authority Board of Directors, effective January 10, 2013. Director Bond was the Water Authority’s alternate representative to the Colorado River Board and his resignation created a vacancy.

Pursuant to the Water Authority’s Administrative Code, Section 9.04.010, I have consulted with the Vice-Chair and Secretary of the Board, and recommend the Board of Directors approve the submission of Director Michael T. Hogan for appointment as the representative to the Colorado River Board and Director Bud Pocklington for appointment as the alternate representative to the Colorado River Board. I also recommend that Directors Javier Saunders and Hershell Price be submitted as alternate nominees as required by Water Code Section 12512.

I respectfully request the Board’s approval of Resolution 2013-______.
RESOLUTION NO. 2013 - ____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN DIEGO COUNTY WATER AUTHORITY SUBMITTING NAMES AND REQUESTING APPOINTMENT BY THE GOVERNOR OF MICHAEL T. HOGAN AS THE WATER AUTHORITY’S REPRESENTATIVE AND BUD POCKLINGTON THE WATER AUTHORITY’S ALTERNATE REPRESENTATIVE TO THE COLORADO RIVER BOARD OF CALIFORNIA

WHEREAS, under Water Code section 12512 the Water Authority is entitled to have one representative and one alternate representative appointed to the Colorado River Board; and

WHEREAS, the Water Authority’s representative to the Colorado River Board, W.D. “Bill” Knutson, has resigned effective January 2, 2013; and

WHEREAS, the Water Authority’s alternate representative to the Colorado River Board, James Bond, has resigned effective January 10, 2013; and

WHEREAS, pursuant to the California Water Code and Section 9.04.010 of the San Diego County Water Authority Administrative Code, the Board Chair has recommended the appointment of Michael T. Hogan to serve as a member of the Colorado River Board and Bud Pocklington to serve as an alternate member of the Colorado River Board; and

WHEREAS, Michael T. Hogan has the experience and qualifications to be a member of the Colorado River Board; and

WHEREAS, Bud Pocklington has the experience and qualifications to be an alternate member of the Colorado River Board; and

WHEREAS, Water Code Section 12512 requires the submission of two other names for consideration; and

WHEREAS, pursuant to the mandate of Section 12512, Director Wornham recommends Directors Javier Saunders and Hershell Price be submitted as alternate nominees;

NOW THEREFORE, the Board of Directors of the San Diego County Water Authority resolves as follows:

1. Michael T. Hogan is recommended for appointment as the Water Authority’s member of the Colorado River Board.

2. Bud Pocklington is recommended for appointment as the Water Authority’s alternate member of the Colorado River Board.

3. The Chair is authorized to submit to the Governor of the State of California a letter recommending and requesting the appointment of Michael T. Hogan as the Water Authority’s representative, and Bud Pocklington, as the Water Authority’s alternate
PASSED, APPROVED, and ADOPTED this 24th day of January 2013.

AYES:

NOES:

ABSTAIN:

ABSENT:

______________________________
Thomas V. Wornham, Chair

ATTEST:

______________________________
Michael T. Hogan, Secretary

I, Doria F. Lore, Clerk of the Board of Directors of the San Diego County Water Authority, certify that the vote shown above is correct and this Resolution No. 2013-____ was duly adopted at the meeting of the Board of Directors on the date stated above.

______________________________
Doria F. Lore
Clerk of the Board
January 16, 2013

Attention: Board of Directors

General Counsel’s Report – December 2012/January 2013

Purpose
This report discusses certain legal matters receiving attention during the months of December 2012/January 2013.

Significant Developments in Pending Litigation

MWD Rate Case:
The Court held a further case management conference on January 15, 2013. The case has been assigned to Judge Curtis Karnow; who was assigned to the complex litigation department to replace Judge Richard Kramer. Over MWD's objections, Judge Karnow granted the Water Authority's motion seeking leave to amend the 2010 lawsuit to add specific language alleging that MWD violated Prop. 26 when imposing its 2011 and 2012 rates. This allegation is now explicitly part of both cases. Judge Karnow set the next case management conference for April 23, 2013 and outlined a potential case management schedule under which we could get to trial by November of this year.

LADWP PRA Litigation:
The Court set a trial date for April 25, 2013 at 9:30 a.m.

QSA Litigation:
The matter is under submission by the trial court. A decision is expected in early to mid-February.

Special Counsel Expenditures
Funds approved for payments to special counsel during December 2012-January 2013 from the General Counsel’s Operating Budget totaled $115,081.46 for work related to the Metropolitan rate dispute, enforcement of requests for public records, and bond counsel services. In addition, $144,670.79 was approved for payment from the Colorado River Programs' Operating Budget for work related to QSA matters, $88,149.30 was approved for payment from the Water Resources' Operating Budget for work related to desalination, and $110.00 was approved for payment from the Human Resources' Operating Budget for work related to public employees pension reform act matters. CIP expenditures during December 2012-January 2013 were $541,618.85 for work related to the Olivenhain Lake Hodges Pump Storage Project, the SDG&E contract, Traylor-Shea Joint Venture, and desalination.

Prepared by: Daniel S. Hentschke

Attachment: Special Counsel Expenditure Report
<table>
<thead>
<tr>
<th>Special Counsel</th>
<th>Project</th>
<th>Total $ Expended FYs 10 &amp; 11 (Fees &amp; Costs)</th>
<th>OP Budget Invoices Approved for Payment this Period</th>
<th>CIP Budget Invoices Approved for Payment this Period</th>
<th>Total $ Expended FYs 12 &amp; 13 (Fees &amp; Costs)</th>
<th>Budget Allocation FYs 12 &amp; 13 for Legal Services $4,700,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR Services (Hon. A. Joseph, Mediator)</td>
<td>Olivenhain Mediation *</td>
<td>$2,075.00 (OP)</td>
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<td>Arnold &amp; Porter (formerly Howard Rice...)</td>
<td>Metropolitan Rates</td>
<td>$466,425.77 (OP)</td>
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<td>$21,543.24 (OP)</td>
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<td>Aviles, Kelly A.</td>
<td>Enforcing Requests for Public Records</td>
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<td>$25,967.54 (OP)</td>
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<td>Best, Best &amp; Krieger</td>
<td>Retirement Matters *</td>
<td>$8,154.70 (OP)</td>
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<td>Brownstein, Hyatt, Farber, Schreck</td>
<td>IID/SDCWA Transfer</td>
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<td>General Legal Matters (as assigned)</td>
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<td>QSA Litigation</td>
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<td>$591,576.77 (OP)</td>
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<td></td>
<td>Federal Clean Air Act Challenge / QSA</td>
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<td>$896.50 1</td>
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<td>Audit Letter</td>
<td>$25,403.28 (CIP)</td>
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<td>Price Reset</td>
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<td>2011 Change Petition</td>
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<td>Colantuono &amp; Levin</td>
<td>Metropolitan Rates</td>
<td>$547,302.10 (OP)</td>
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<td>Daley &amp; Heft</td>
<td>SDCWA v. Atlantic/Deluca *</td>
<td>$7,582.90 (OP)</td>
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<td></td>
<td>SDCWA v. NIAC *</td>
<td>$61,660.95 (OP)</td>
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<td>Additional Aqueduct Width Project-Twin Oaks</td>
<td>$5,467.50 (CIP)</td>
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<td>Duncan &amp; Allen</td>
<td>Rancho Penasquitos</td>
<td>$187.50 (CIP)</td>
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<td>Pressure Control Hydroelectric Facility Project *</td>
<td>$118.50 (OP)</td>
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<td>San Vicente FERC Project</td>
<td>$4,012.50 (CIP)</td>
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<td>$1,343.00 (CIP)</td>
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<td>Olivenhain/Lake Hodges FERC Proj.</td>
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<td>$395.00 (CIP)</td>
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<td>Frank, Lynn S. (Mediator)</td>
<td>TOV WTP *</td>
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<td>Hawkins, Delafield &amp; Wood</td>
<td>Proposed Desalination Projekt. Pipeline Conveyance</td>
<td>$675,353.40 (OP) 2</td>
<td>$88,149.30 2</td>
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<td>$99,088.79</td>
<td>$545,190.72 2 (OP)</td>
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<td>$394,245.70 (CIP)</td>
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<td>Olivenhain Mediation *</td>
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<td>IID Arbitration *</td>
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<td>Discovery Referee (MWD Rate Case)</td>
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<td>Jenkins &amp; Hogin</td>
<td>Conflict of Interest/Open Meeting Law Compliance *</td>
<td>$2,117.50 (OP)</td>
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<td>Keker &amp; Van Nest</td>
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<td>Liebert Cassidy Whitmore</td>
<td>Personnel Issues Labor Negotiations</td>
<td>$16,269.40 (OP) 3</td>
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<td>$50,103.38 3 (OP)</td>
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* Concluded matters or assignments.

1 Not included in totals, these legal expenses related to QSA are coming out of Colorado River Program budget, not GC budget
2 Not included in totals, legal expenses related to proposed desalination project are coming out of Water Resources budget, not GC budget
3 Not included in totals, legal expenses related to personnel issues/labor negotiations are coming out of Human Resources budget, not GC budget
<table>
<thead>
<tr>
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<tr>
<td>McKenna Long &amp; Aldridge</td>
<td>TOW WTP *</td>
<td>$749,193.84 (CIP)</td>
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<td>(Up to $3.5 mil in additional funds was authorized in Nov. 2012)</td>
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<td>Audit Letter</td>
<td>$292.00 (OP)</td>
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<td>Olivenhain-Lake Hodges Pump House</td>
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<td>San Vicente Dam Raise *</td>
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<td>SDG&amp;E Contract</td>
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<td>$8,105.62 (CIP)</td>
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<td>$5,048.72 (OP)</td>
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<td>Bond Counsel Services/Desal</td>
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<td>Owen Wickersham &amp; Erickson</td>
<td>Copyright</td>
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<td>$276.00 (OP)</td>
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<td>Pillsbury Winthrop Shaw Pittman</td>
<td>Terminal Pay Plans/Defined Benefit Pension Plans</td>
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<td>$10,708.00 (OP)</td>
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<td>IRS Audit Matters</td>
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<td>Procopio Cory Hargreaves &amp; Savitch</td>
<td>Traylor/Shea Joint Venture (TSJV)</td>
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<td>Multiple Tunnel Shift Pay</td>
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<td>Reilly &amp; Associates</td>
<td>Personnel Issue</td>
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<td>Rights Watson &amp; Gershon</td>
<td>Water Conveyance Dispute *</td>
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<td>Townsend</td>
<td>Trademark *</td>
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<td>Wiener, Howard (Mediator)</td>
<td>MWD RSI Mediation</td>
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<td>Enforcing Requests for Public Records</td>
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<td>Total:</td>
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<td>$115,081.46</td>
<td>$541,618.85</td>
<td>$3,537,873.54 (OP)</td>
<td>$1,162,126.46 (CIP)</td>
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<td>$3,168,456.49 (CIP)</td>
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</table>

* Concluded matters or assignments.

1 Not included in totals, legal expenses related to bond counsel services (desal) are coming out of the Finance budget, not GC budget
2 Not included in totals, legal expenses related to copyright matter are coming out of Conservation budget, not GC budget
3 Not included in totals, legal expenses related to personnel issue are coming out of Human Resources budget, not GC budget