NOTICE TO THE PUBLIC


PUBLIC COMMENT MAY BE SUBMITTED BY EITHER OF THESE TWO METHODS:

1. BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, SUBMIT YOUR TELEPHONE NUMBER BY E-MAIL TO THE CLERK AT MNELSON@SDCWA.ORG AND THE CLERK WILL CALL YOU WHEN THE BOARD IS READY TO HEAR YOUR PUBLIC COMMENT (THREE MINUTES OR LESS); OR

2. BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, E-MAIL YOUR COMMENT TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG AND IT MAY BE READ ALOUD AT THE PUBLIC COMMENT PERIOD (THREE-MINUTE LIMIT).

IF MODIFICATIONS OR ACCOMMODATIONS FROM INDIVIDUALS WITH DISABILITIES ARE REQUIRED, SUCH PERSONS SHOULD PROVIDE A REQUEST AT LEAST 24 HOURS IN ADVANCE OF THE MEETING BY E-MAIL TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG

BOARD OF DIRECTORS’ AND STANDING COMMITTEES’ REGULAR MEETING

9:00 A.M. SEPTEMBER 23, 2021

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 and Public Outreach, and Water Planning and Environmental 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 on the Water Authority website at https://www.sdcwa.org/meetings-and-documents. Additional documents may be distributed at the meeting electronically, and will be made available. Copies of individual items are available through the Clerk of the Board at (858) 522-6614.

3. **MEETING TIMES:** The morning session of the Standing Committees will commence at 9:00 a.m. on September 23, 2021, and any afternoon session of the Standing Committees may commence at the conclusion of the morning session and earlier than 1:00 p.m. Please see the meeting schedule. The meeting of the full Board may begin as early as 1:00 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. Items receiving substantive review by a standing committee are generally included on the Consent Calendar for action at the meeting of full Board. 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.

6. **PUBLIC HEARINGS OR COMMENT:** Any comments related to a public hearing should be made as stated in the special notice section above.

7. **ACCESS FOR THE DISABLED:** See above notice.

8. **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.

9. **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 online at [www.sdcwa.org](http://www.sdcwa.org).
MEETING SCHEDULE *

SEPTEMBER 23, 2021

9:00 A.M. START TIME FOR COMMITTEE MEETINGS

- Administrative & Finance Committee
- Imported Water Committee
- Legislation & Public Outreach Committee
- Engineering & Operations Committee
- Water Planning & Environmental Committee

FORMAL BOARD MEETING 1:00 p.m.

* The Committees are listed above in the order in which they will proceed. The Committee meetings will start at 9:00 a.m. and continue until concluded. The regular Board meeting will start no earlier than 1:00 p.m., and will follow the conclusion of the last Committee meeting.

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(2) BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, E-MAIL YOUR COMMENT TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG, AND TIME ALLOWING IT MAY BE READ ALOUD AT THE PUBLIC COMMENT PERIOD (THREE-MINUTE LIMIT).

IF MODIFICATIONS OR ACCOMMODATIONS FROM INDIVIDUALS WITH DISABILITIES ARE REQUIRED, SUCH PERSONS SHOULD PROVIDE A REQUEST AT LEAST 24 HOURS IN ADVANCE OF THE MEETING BY E-MAIL TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG]

ADMINISTRATIVE AND FINANCE COMMITTEE

REVISED AGENDA FOR

SEPTEMBER 23, 2021

Marty Miller, Chair Matt Hall
Jimmy Ayala, Vice Chair Frank Hilliker
Doug Wilson, Vice Chair Gary Hurst
Ismahan Abdullahi Mel Katz
Gary Arant Tom Kennedy
Brian Boyle Jim Madaffer
Chris Cate Kim Thorner
Gary Croucher

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-A Directors’ comments.

I. CONSENT CALENDAR

   Staff recommendation: Note and file the Treasurer’s report.
   (Action)
   Lisa Marie Harris

2. Agreement with Oracle USA, Inc. to renew the Enterprise Resource Planning System software annual maintenance and support agreements.
   Staff recommendation: Authorize the General Manager to renew the Enterprise Resource Planning System software annual maintenance and support agreements with Oracle USA, Inc. for two years at a total cost of $623,274.35. (Action)
   Matt Bartolome

II. ACTION/DISCUSSION/PRESENTATION

1. Financial Strategy Work Group Update. (Presentation)
   Frank Hilliker

2. Adopt the Water Authority’s 2021 Long-Range Financing Plan.
   Staff recommendation: Adopt the Water Authority’s 2021 Long-Range Financing Plan. (Action)
   Lisa Marie Harris

III. INFORMATION

1. Report on General Manager-awarded purchase orders and contracts for goods and services above $10,000.
   Jackie Carmona

   Chris Woidzik

3. Board calendar.

IV. CLOSED SESSION

V. ADJOURNMENT

Melinda Nelson, 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.
September 15, 2021

Attention: Administrative and Finance Committee

Monthly Treasurer’s Report on Investments and Cash Flow

Purpose

The Treasurer’s Report provides monthly financial information to the Board of Directors.

Executive Summary

The Water Authority is well diversified with investment holdings in Agencies, Treasuries and Corporate notes totaling approximately 54% of the portfolio. The overall portfolio of $248.3 million maintained a Market Yield of 1.713% exceeding the Intercontinental Exchange Bank of America (ICE BofA) benchmark.

<table>
<thead>
<tr>
<th>Information as of 8/31/21</th>
<th>ICE BofA 1-3 Year US Treasury &amp; Agency Index</th>
<th>SDCWA Consolidated Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Yield</td>
<td>n/a</td>
<td>1.581%</td>
</tr>
<tr>
<td>Market Yield</td>
<td>0.20%</td>
<td>1.559%</td>
</tr>
<tr>
<td>Book Value</td>
<td>n/a</td>
<td>$248,287,150</td>
</tr>
<tr>
<td>Weighted Average Maturity</td>
<td>1.83</td>
<td>1.50</td>
</tr>
</tbody>
</table>

The Treasurer’s Report is attached for review by the Administrative and Finance Committee and the Board of Directors. The report provides documentation that the Water Authority has sufficient funds to meet its financial obligations for the next six months. A brief description of each report follows:

Portfolio Master Summary: A summary of the Water Authority’s cash and investments.

Chandler Portfolio Summary: A snapshot of the investment manager’s portfolio holdings and characteristics, account summary, top issuers, sector allocation, maturity distribution and credit quality.

Portfolio Details - Investments: A detailed listing of the Portfolio Master Summary’s cash and investments.

The Water Authority’s portfolio is diversified among investment types with a concentration toward short-term maturities. This concentration is the result of current cash flow needs. Market value information is provided by the Bank of New York Mellon and is as of the report date.

In August 2021, the Water Authority’s overall portfolio Purchase and Market Yields were 1.581% and 1.559%, respectively. The benchmark yield increased slightly in August but is still relatively low as demand for US Government Securities remains high and the Federal Reserve continues to purchase at least $120 billion per month of US Treasuries and Agency Mortgage-Backed Securities.

All investments have been made in accordance with the Water Authority’s Annual Statement of Investment Policy, which was last adopted by the Board on November 19, 2020. The reports are completed in accordance with California Government Code Section 53607.

Lisa Marie Harris, Director of Finance/Treasurer
## PORTFOLIO PERCENTAGES

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Permitted By Board Policy</th>
<th>Portfolio Percentage</th>
<th>Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Agency Investment Fund (LAIF) $75 Million</td>
<td>$75 Million</td>
<td>31.79%</td>
<td>$74,943,699</td>
</tr>
<tr>
<td>Banker's Acceptances</td>
<td>40%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>Treasury Securities*</td>
<td>100%</td>
<td>20.67%</td>
<td>48,719,281</td>
</tr>
<tr>
<td>Agency Securities*</td>
<td>100%</td>
<td>17.21%</td>
<td>40,556,368</td>
</tr>
<tr>
<td>Asset-Backed, Mortgage-Backed, Mortgage Pass-Through Securities, and Collateralized Mortgage Obligations</td>
<td>20%</td>
<td>1.34%</td>
<td>3,164,778</td>
</tr>
<tr>
<td>Supranational Securities*</td>
<td>10%</td>
<td>4.58%</td>
<td>10,792,880</td>
</tr>
<tr>
<td>Repurchase Agreements</td>
<td>20%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>Reverse Repurchase Agreements</td>
<td>20%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>Certificates of Deposit (Placement, Negotiable &amp; Time Deposits)</td>
<td>30%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>25%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>Medium Term Notes/Corporates*</td>
<td>30%</td>
<td>16.28%</td>
<td>38,367,125</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>30%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>JPA Pools (CAMP)</td>
<td>25%</td>
<td>7.23%</td>
<td>17,053,136</td>
</tr>
<tr>
<td>Mutual Funds and Money Market Mutual Funds*</td>
<td>20%</td>
<td>0.90%</td>
<td>2,114,199</td>
</tr>
<tr>
<td>Acrued Interest (unavailable for investing)</td>
<td></td>
<td></td>
<td>7,306</td>
</tr>
<tr>
<td>Checking/Petty Cash/Available Funds (unavailable for investing)</td>
<td></td>
<td></td>
<td>327,603</td>
</tr>
<tr>
<td><strong>Subtotal for Pooled Funds:</strong></td>
<td></td>
<td>100.00%</td>
<td>$235,711,466</td>
</tr>
<tr>
<td>Debt Service Reserve (DSR) Funds Excluded from Portfolio Percentages:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trinity Plus - Reserve (GIC) - Series 1998A COPs</td>
<td></td>
<td></td>
<td>12,240,775</td>
</tr>
<tr>
<td>**Subtotal for Debt Service Reserve Funds (unavailable for CIP expenditures):</td>
<td></td>
<td></td>
<td>$12,240,775</td>
</tr>
<tr>
<td>Total Cash and Investments</td>
<td></td>
<td></td>
<td>$248,287,150</td>
</tr>
</tbody>
</table>

### PORTFOLIO INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>Pooled Funds **</th>
<th>Debt Service Reserve</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio Yield to Maturity - 365 Days</td>
<td>1.37%</td>
<td>5.55%</td>
<td>1.58%</td>
</tr>
<tr>
<td>Average Term</td>
<td>1,051</td>
<td>1</td>
<td>999</td>
</tr>
<tr>
<td>Average Days to Maturity</td>
<td>575</td>
<td>1</td>
<td>546</td>
</tr>
</tbody>
</table>

* Some investments in these categories are managed by Chandler Asset Management.

** Pooled Funds include Operating, Pay Go, RSF, Equipment and Stored Water funds.
ACCOUNT SUMMARY
As of August 31, 2021

<table>
<thead>
<tr>
<th></th>
<th>Beg. Values as of 7/31/21</th>
<th>End Values as of 8/31/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Value</td>
<td>146,890,314</td>
<td>146,838,877</td>
</tr>
<tr>
<td>Accrued Interest</td>
<td>653,739</td>
<td>672,005</td>
</tr>
<tr>
<td>Total Market Value</td>
<td>147,544,053</td>
<td>147,510,881</td>
</tr>
<tr>
<td>Income Earned</td>
<td>246,645</td>
<td>241,410</td>
</tr>
<tr>
<td>Cont/WD</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Par</td>
<td>142,528,685</td>
<td>142,874,110</td>
</tr>
<tr>
<td>Book Value</td>
<td>141,418,771</td>
<td>141,787,671</td>
</tr>
<tr>
<td>Cost Value</td>
<td>141,418,771</td>
<td>141,787,671</td>
</tr>
</tbody>
</table>

TOP ISSUERS
Government of United States 34.3%
Federal Home Loan Bank 11.1%
Federal National Mortgage Assoc 11.1%
Federal Home Loan Mortgage Corp 6.2%
Inter-American Dev Bank 3.4%
Intl Bank Recon and Development 2.7%
Bank of America Corp 2.2%
Deere & Company 2.1%
Total 73.2%

SECTOR ALLOCATION

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Treasury</td>
<td>34.3%</td>
</tr>
<tr>
<td>Agency</td>
<td>28.4%</td>
</tr>
<tr>
<td>Corporates</td>
<td>27.4%</td>
</tr>
<tr>
<td>Supras</td>
<td>7.5%</td>
</tr>
<tr>
<td>ABS</td>
<td>2.2%</td>
</tr>
<tr>
<td>Money Mkt for</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Maturity Distribution

<table>
<thead>
<tr>
<th>Maturity (Yrs)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - .25</td>
<td>0.2%</td>
</tr>
<tr>
<td>.25 - .5</td>
<td>5.0%</td>
</tr>
<tr>
<td>.5 - 1</td>
<td>2.8%</td>
</tr>
<tr>
<td>1 - 2</td>
<td>26.0%</td>
</tr>
<tr>
<td>2 - 3</td>
<td>10.5%</td>
</tr>
<tr>
<td>3 - 4</td>
<td>20.4%</td>
</tr>
<tr>
<td>4 - 5</td>
<td>2.5%</td>
</tr>
<tr>
<td>5+</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

CREDIT QUALITY (S&P)

- AAA (8.5%)
- AA (12.6%)
- A (21.6%)
- NR (1.4%)
- NR (1.4%)
- AA (8.5%)
## SDCWA - Fiscal Year 2022
### Portfolio Management
#### Portfolio Summary
August 31, 2021

<table>
<thead>
<tr>
<th>Investments</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>% of Portfolio</th>
<th>Term</th>
<th>Days to Maturity</th>
<th>YTM 360 Equiv.</th>
<th>YTM 365 Equiv.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed Pool Accounts</td>
<td>104,783,006.89</td>
<td>104,783,006.89</td>
<td>104,783,006.89</td>
<td>42.53</td>
<td>1</td>
<td>1</td>
<td>0.803</td>
<td>0.814</td>
</tr>
<tr>
<td>Medium Term Notes</td>
<td>38,500,000.00</td>
<td>40,110,875.00</td>
<td>38,367,125.00</td>
<td>15.57</td>
<td>1,693</td>
<td>606</td>
<td>3.002</td>
<td>3.044</td>
</tr>
<tr>
<td>Federal Agency - Coupon</td>
<td>40,250,000.00</td>
<td>41,658,132.50</td>
<td>40,556,367.50</td>
<td>16.46</td>
<td>1,765</td>
<td>1,021</td>
<td>1.885</td>
<td>1.911</td>
</tr>
<tr>
<td>Treasury Securities - Coupon</td>
<td>49,650,000.00</td>
<td>50,497,842.38</td>
<td>48,726,368.66</td>
<td>19.78</td>
<td>1,764</td>
<td>1,152</td>
<td>1.739</td>
<td>1.763</td>
</tr>
<tr>
<td>Supranationals</td>
<td>11,000,000.00</td>
<td>11,088,988.75</td>
<td>10,793,098.75</td>
<td>4.38</td>
<td>1,687</td>
<td>920</td>
<td>1.788</td>
<td>1.813</td>
</tr>
<tr>
<td>Asset Backed Securities</td>
<td>3,163,410.71</td>
<td>3,179,742.98</td>
<td>3,164,777.70</td>
<td>1.28</td>
<td>1,653</td>
<td>1,203</td>
<td>1.394</td>
<td>1.413</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>246,390,744.50</td>
<td>251,318,588.50</td>
<td>246,390,744.50</td>
<td>100.00%</td>
<td>999</td>
<td>546</td>
<td>1.559</td>
<td>1.581</td>
</tr>
</tbody>
</table>

### Cash

| Passbook/Checking               | 1,896,405.59   | 1,896,405.59   | 1,896,405.59  | 1    | 1    | 0.008          | 0.008          |

| **Total**                       | 249,242,823.19 | 253,214,994.09 | 248,287,150.09 | 999  | 546  | 1.559          | 1.581          |

### Total Earnings

| August 31 Month Ending          | Current Year 380,320.01 | Average Daily Balance 260,109,002.49 | Effective Rate of Return 1.72% |

SDCWA,
SDCWA - Fiscal Year 2022
Portfolio Management

Page 1

Portfolio Details - Investments
August 31, 2021
CUSIP

Investment #

Issuer

Average
Balance

Purchase
Date

Par Value

Market Value

Book Value

310,699.61
17,053,136.23
234,696.59
74,943,699.46
12,240,775.00
0.00

310,699.61
17,053,136.23
234,696.59
74,943,699.46
12,240,775.00
0.00

310,699.61
17,053,136.23
234,696.59
74,943,699.46
12,240,775.00
0.00

104,783,006.89

104,783,006.89

104,783,006.89

1,000,000.00
1,500,000.00
2,000,000.00
1,000,000.00
1,000,000.00
2,000,000.00
1,000,000.00
2,000,000.00
1,000,000.00
2,000,000.00
2,000,000.00
1,500,000.00
1,000,000.00
1,000,000.00
2,000,000.00
1,000,000.00
2,000,000.00
1,000,000.00
2,000,000.00
1,000,000.00
1,000,000.00
1,000,000.00
1,500,000.00
500,000.00
2,000,000.00
1,000,000.00
2,500,000.00

1,057,460.00
1,586,190.00
2,081,980.00
1,087,390.00
1,034,100.00
2,016,980.00
1,072,700.00
2,072,560.00
1,036,280.00
2,030,560.00
2,106,200.00
1,583,370.00
1,055,580.00
1,054,460.00
2,065,760.00
1,069,110.00
2,064,120.00
1,036,840.00
2,018,740.00
1,053,850.00
1,054,350.00
1,054,350.00
1,545,945.00
515,315.00
2,121,840.00
1,062,470.00
2,572,375.00

1,010,270.00
1,522,425.00
1,974,080.00
1,066,440.00
985,150.00
1,990,160.00
1,026,890.00
1,935,580.00
964,090.00
2,017,440.00
2,031,020.00
1,500,885.00
993,040.00
980,690.00
1,955,820.00
1,029,360.00
1,997,760.00
957,680.00
2,024,720.00
992,310.00
1,013,870.00
1,011,890.00
1,460,985.00
485,900.00
2,003,760.00
993,060.00
2,441,850.00

38,500,000.00

40,110,875.00

38,367,125.00

Stated
Rate

S&P

YTM Days to
365 Maturity

Maturity
Date

Managed Pool Accounts
CASH21
CASH35
CASH11
CASH13
CASH17
CASH33

2200
73
0002
72
204
208

Bank of New York Mellon Corp
CAMP - OPERATING/POOLED
GOLDMAN - OPERATING/POOLED
LAIF - OPERATING
TRINITY PLUS - 1998A
US BANK MONEY MARKET FUND
Subtotal and Average

119,434,314.08

0.010
0.050
0.030
0.220
5.550
0.001

A
AAA
AAA
AA+
AAA

0.010
0.050
0.030
0.220
5.550
0.001

1
1
1
1
1
1

0.814

1

2.768
2.647
3.625
2.510
3.136
2.708
3.042
3.446
3.603
2.154
1.959
3.437
3.614
4.075
3.198
2.778
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Bank of America Corp
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Bank of New York Mellon Corp
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Chubb INA Holdings Inc
Eli Lilly & Co.
Honeywell International
AMERICAN HONDA FINANCE CORP
AMERICAN HONDA FINANCE CORP
HSBC HOLDINGS
JOHN DEERE CAPITAL CORP
JOHN DEERE CAPITAL CORP
JP MORGAN SECURITIES LLC
JP MORGAN SECURITIES LLC
PNC BANK NA
PNC BANK NA
Royal Bank of Canada
Royal Bank of Canada
Charles Schwab Corp
Charles Schwab Corp
TORONTO DOMINION BANK
TOYOTA MOTOR CREDIT CORP.
VISA INC
Subtotal and Average

Run Date: 09/03/2021 -Page
08:07

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Portfolio CWA2
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Report Ver. 7.3.6.1


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**Subtotal and Average**
- Federal Agency - Coupon: 42,228,972.66
- Treasury Securities - Coupon: 40,250,000.00

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# Portfolio Details - Investments

**August 31, 2021**

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**Portfolio Details - Investments**

**Run Date: 09/03/2021**

**Page 12 of 299**
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Average Balance: 0.00

Total Cash and Investments:

- Average Balance: 260,109,002.49
- Purchase Date: 249,242,823.19
- Market Value: 253,214,994.09
- Book Value: 248,287,150.09
- Stated Rate: 1.581
- S&P 365 YTM: 546
September 15, 2021

Attention: Administrative and Finance Committee

Agreement with Oracle USA, Inc. to renew the Enterprise Resource Planning System software annual maintenance and support agreements. (Action)

Staff recommendation
Authorize the General Manager to renew the Enterprise Resource Planning System software annual maintenance and support agreements with Oracle USA, Inc. for two years at a total cost of $623,274.35.

Alternatives
1. Authorize the General Manager to renew the Enterprise Resource Planning System software annual maintenance and support agreements with Oracle USA, Inc. for one year at a cost of $311,055.69. If the Water Authority renews again with Oracle a year from now, the estimated cost would be $331,197.58, bringing the total Oracle agreement renewal costs over the two years to $642,253.27.

2. Do not renew the Enterprise Resource Planning System software annual maintenance and support agreements. The software would no longer be supported and would become obsolete and less secure. Software errors, regular security updates and missing functionality may impact the timely release and accuracy of financial documents, mandated reporting, payroll and federal regulatory distributions or vendor payments.

Fiscal Impact
Sufficient funds for the Enterprise Resource Planning System software annual maintenance and support agreements are included in the Board-approved operations budget for fiscal years 2022 and 2023. The rate category is Customer Service.

Executive Summary

- The Water Authority needs to renew its Oracle software licensing agreements before the current agreements expire on September 30, 2021.
- Oracle’s software provides the Water Authority with critical financial, payroll and human resource planning tools.
- The recommended renewal is for two years and allows the Water Authority to continue receiving critical security and regulatory compliance updates and other support.
- The recommended renewal is the most cost-effective option after soliciting multiple cooperative agreements.
- Funds to cover the renewal cost of $623,274.35 are included in the Water Authority’s Board-approved budget for fiscal years 2022 and 2023.
Background
The Board approved the purchase of the Peoplesoft Enterprise Resource Planning (ERP) system in January 1996 to support the Water Authority’s financial, human resources, and payroll activities. Peoplesoft was later acquired by Oracle USA, Inc. To ensure the software is kept current and does not become obsolete, the Water Authority renews its maintenance and support agreements every few years. Annual maintenance fees are calculated based on the particular software modules purchased and number of licenses issued, and they include an annual inflationary adjustment. The latest renewal was approved in June 2017, and it expires at the end of September 2021.

In June 2017, the Board authorized the General Manager to renew the Peoplesoft Enterprise Resource Planning System annual maintenance and support agreements with Oracle USA, Inc., for four fiscal years, from 2018 through 2021, for a cumulative amount of $899,085.

Discussion
The ERP system software enables the Water Authority to meet its critical business needs, which include processing of financial transactions, complying with financial reporting requirements, federal payroll and tax regulations, and executing the Capital Improvement Program.

The ERP system software maintenance and support agreements help protect the Water Authority’s technology investment by keeping the software current with tax updates, bug fixes and the latest upgrades and enhancements. The software and support agreements also include access to 24/7 online and phone-based technical and customer support resources and user groups.

This summer staff solicited quotes to renew our existing agreements. The Water Authority received multi-year and one-year options both direct from Oracle as well as through third-party cooperative agreements. Staff recommends the direct agreements with Oracle because it was the most cost-effective option, and staff recommends the two-year term because it balances the cost savings of avoiding an inflationary increase in the second year with the flexibility to re-assess the licensing market sooner than a longer agreement would if conditions change.

The staff recommendation and first alternative also include existing database licensing services, which were not included in the current agreement and procured separately. All Oracle services are being combined into one contract to streamline the procurement process and simplify Oracle account management. The amount of the database licensing services is $176,271.83 for the two-year term, and is included in the $623,274.35 total.

Due to the special circumstances for this type of service, SCOOP outreach requirements were not applicable.

Prepared by: Sabrina Garner, Management Analyst
Matt Bartolome, Information Systems Manager
Reviewed by: Jason Foster, Director of Administrative Services
Approved by: Tish Berge, Assistant General Manager
September 15, 2021

Attention: Administrative and Finance Committee

Financial Strategy Work Group Update. (Presentation)

Purpose
The Financial Strategy Work Group (FSWG) process provides an opportunity for dialogue for development and implementation of strategies for continued financial health and resilience of the Water Authority.

Background
There has periodically been a Fiscal Sustainability Task Force (FSTF) to examine and assess, with help from counsel, certain financial policies of the Water Authority. Building from the foundation offered by the Fiscal Sustainability Task Force (2013 and 2018), the new FSWG provides an opportunity for addressing current and future financial or economic challenges.

Topics covered in the first four meetings of the FSWG included discussions on guiding principles and plans for the group, the Capital Improvement Program, the Long-Range Financing Plan, Water Authority credit ratings and the reports, the Urban Water Management Plan and the Long-Range Demand Forecast, the water sales forecast and rates development, and the Fiscal Years 2022 and 2023 budget development, and the Special Agricultural Water Rate Program.

Discussion
The FSWG met on August 27, and September 13, 2021, to review and discuss the Long-Range Financing Plan development. On August 27, Kelley Gage, Director of Water Resources, gave an update on the Urban Water Management Plan comparisons. Lisa Marie Harris, Director of Finance/Treasurer gave a recap on the Recommended Long-Range Financing Plan highlights and follow up items. Next Pierce Rossum, Rate and Debt Manager, presented on the rate impacts included in the Recommended Long-Range Financing Plan. At the September 13, FSWG meeting Pierce Rossum gave a presentation addressing questions from the City of San Diego, followed by a roundtable discussion the FSWG recommendation for the Long-Range Financing Plan.

A presentation from the August 27 and September 13, FSWG meetings was presented to Member Agency Managers on Tuesday, September 14, 2021. The next FSWG meeting will be on Friday, September 24, 2021, with a follow-up presentation to the Member Agency Managers again in October.

Prepared by: Pierce Rossum, Rate & Debt Manager
Liana Whyte, Budget & Treasury Manager
Reviewed by: Lisa Marie Harris, Director of Finance/Treasurer
Approved by: Tish Berge, Assistant General Manager

Attachments:
Attachment 1 – Financial Strategy Work Group Meeting Agenda for August 27, 2021
Attachment 2 – Financial Strategy Work Group Presentation for August 27, 2021
Attachment 3 – Financial Strategy Work Group Meeting Agenda for September 13, 2021
Attachment 4 – Financial Strategy Work Group Presentation for September 13, 2021

1 General remarks made here are without waiver of attorney-client privilege or attorney work product.
FINANCIAL STRATEGY WORK GROUP
AGENDA FOR
Friday, August 27, 2021 - Meeting #8
8:00 – 10:00 a.m.
Microsoft Teams

Frank Hilliker, Chair  Carlos Lugo  Mona Rios
Gary Arant  Jim Madaffer  Matt Vespi
Chris Cate  Marty Miller  Doug Wilson
Mike Hogan

1. Summary of Topics Covered from Meeting #7 (Chair Hilliker)
2. UWMP Demand Comparisons (Gage)
3. LRFP Follow-up Discussion (Harris)
4. Rate Design Comparisons (Rossum)
5. Budget and Rate Policy (Whyte)
6. Schedule & Next Steps (Harris)
Meeting #7 Summary of Topics Covered

- LRFP Guidance from Our Financial Advisors

- Development Baseline Scenario
  - General Assumptions
  - Single Debt Issue | Debt (2) Bookend | Three Debt Issues

- Water Demand Forecast (High/Low)

- FSWG Roundtable
Today’s Agenda

- CWA and Member Agency UWMP Demand Comparison

- LRFP Recommendation - Recap

- Rate Design Considerations
  - Review of Prior FSTF Rate Design Slides
  - Goals, Objectives, and Challenges
  - Rate Design Criteria and Considerations

- Budget & Rate Schedule
  - Goals, Objectives, and Challenges
  - Peer Agency Survey

- Schedule and Next Steps
UWMP Demand Comparision
Comparison of Projected Demands on Water Authority

- Updates to chart
  - Ramona MWD data added
  - Vallecitos WD & Santa Fe ID data updated

- Three member agencies do not prepare UWMPs, therefore excluded from analysis
  - City of Del Mar
  - Camp Pendleton
  - Yuima MWD
LRFP Recommendation - Recap
2021 Recommended LRFP Highlights

- **Capital Funding Mix**
  - Targeted 35% Debt / 65% PayGo Funding Mix (nearly inverse of prior 70/30)
  - Two planned debt Issues ($170M in ‘21 and $165M in ’29)
    - Late ‘21 issuance necessary to fund adopted CIP
    - All debt issues will **continue to be Board approved**, prior to issuance, irrespective of LRFP

- **Clarify existing 1.5x Debt Service Coverage Target as “minimum”**
  - Existing practice treats 1.5x as a minimum, this would serve to memorialize that practice

- **Target of 150 Days of Cash on Hand (Operating, PayGo, and RSF)**
  - Maintain existing 45 Day Minimum Operating Reserve
  - Maintain existing RSF per Board policy

- **Significant deleveraging**
  - $335M in new money vs $630M in principal payments
LRFP Board Follow-Up Items

- Comments from City of San Diego
- Year-End CIP Expenditures
- Affordability
- Coverage & Ratings Impact
- Higher Debt Funding Mix
- Infrastructure Access Charge
- High/Low Impact by Member Agency
City of San Diego
Comments/Letter
Fiscal Years 2020/2021 Appropriation Summary

<table>
<thead>
<tr>
<th></th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2020-FY2021</th>
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<tr>
<td>Approved Appropriation</td>
<td>$81.2</td>
<td>$81.1</td>
<td>$162.2</td>
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<tr>
<td>Expenditures</td>
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<td>$44.9</td>
<td>$108.6</td>
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<tr>
<td>Variance</td>
<td></td>
<td></td>
<td>-$53.6</td>
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</table>

Primary drivers for -$53.6M execution of the FY2020/2021 appropriation:

- Board deferral of projects associated with detachment - $23.2M
- Delay advertisement Hauck Mesa Storage Reservoir (COVID) - $8.9M
- Delay acquiring design consultant for ESP - Valley Center Improvements - $6.5M
- New O&M Facility property purchase shift to FY2022/2023 - $5.9M
- Delay in turbine generator equipment procurement for Rancho Peñasquitos Hydroelectric Facility (COVID) - $3.2M
- San Vicente Energy Storage Facility Study (No legislative options) - $2.6M
- San Luis Rey Habitat Management Area Restoration (Resource Agency Permit delays) - $2.0M
Revise Cost Efficiency to Include Affordability

Financial Management Objectives

- **Cost Efficiency.** The cost efficiency objective relates to maintaining the lowest possible revenue requirement from water sales. All other things being equal, lower expenses translate into lower rates for member agencies.

Suggested Language for Discussion:

- **Affordability & Cost Efficiency.** The affordability and cost efficiency objective relates to maintaining the lowest possible revenue requirement (i.e., rates and charges) from water sales. All other things being equal, lower expenses translate into lower and more affordable rates for member agencies.
**Impact of Rating on Borrowing Costs**

- Difference in costs between AAA, AA and A is significant
  - AAA to AA: +0.14%
  - AAA to A: +0.44%

- Given split rating, downgrade impact vary significantly
Recommended Funding Mix Shifts Needs

- Historically been “Coverage Driven”
- Recommended LRFP would shift to a “cash” or paygo driven need as deleveraging occurs
- Coverage above Target/legal minimum is used to PayGO Projects
- Projected Reserves illustrates no “excess”
- ~150 Days of Cash well below median AA and A levels (677+)
Funding Mix Has Little Rate Impact

- Presented in July, the Funding Mix has little impact to forecasted rates.
- However, there are nuances staff would have to manage between each mix
  - Cashflow
  - Coverage requirements
  - Reserve levels
- Higher Debt Mix also doesn’t address current “leverage” concerns
  - Higher mix, beyond 50/50 may require higher assumed interest rates
Rate Impacts by Member Agency

The All-In Rate reflects the overall increase to Water Authority rates, relative to forecasted demands.

As some charges are “fixed” and given disparate Member Agency use, rate impacts may not reflect forecast.
Future Forecasting of Member Agency Impact

- Water Authority does not forecast annual demands by agency

- Demands vary by:
  - M&I Treated
  - M&I Untreated
  - PSAWR Treated
  - PSAWR Untreated
  - Member Agency Local Supply Utilization
  - Potential Local Supply Additions
  - Detachment

- Assumptions
  - 5yr Avg Demands
    - Sweetwater Adjustment
    - Local Supply Additions
  - Excludes Treatment
  - Parallels LRFP Demands
    - further refinement necessary

- Total Annual Impacts
  - Supply (M&I + PSAWR), Transportation, Customer Service, Storage, Supply Reliability, IAC, RTS, and CC
**Highlights:**

Based on preliminary inputs and assumptions

Local Supply Development does lower the Member Agency's total expenditures (Fallbrook, Helix, Padre, Oceanside, San Diego).

Impact remains relative to average demand

Local Supply does not cause a significant cost shift to any one agency
Additional Meetings with Water Authority staff available at Member Agency request

September Board - September 23
  - Consideration for Adoption of Recommended 2021 LRFP
Rate Design Considerations
Rate Design Consideration Overview

- Review of Prior FSTF Rate Design Slides
  - Member Agency Demand Profiles
  - Fixed and Rate Design Considerations

- FSWG Discussion and Considerations
  - Goals, Objectives, and Challenges
  - Rate Design Criteria and Considerations
Historical Demand Profiles

Previously Provided to FSTF
- SDCWA has provided between 80% to 92% of the regions total water demands over the past decade
Helix Water District - Historical Demand Profile

Usage
Groundwater
Surface

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Our Region’s Trusted Water Leader
San Diego County Water Authority

27
Oceanside - Historical Demand Profile
Olivenhain - Historical Demand Profile

Usage vs Reclaimed

Otay - Historical Demand Profile

Usage vs. Reclaimed Water
Poway - Historical Demand Profile

Usage
Reclaimed
Surface


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Our Region's Trusted Water Leader
San Diego County Water Authority 35
Ramona - Historical Demand Profile

Usage
Reclaimed

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Our Region's Trusted Water Leader
San Diego County Water Authority
Rincon - Historical Demand Profile

- Usage
- Reclaimed

Data points for usage and reclaimed water from 2007 to 2018.
Valley Center - Historical Demand Profile
Yuima - Historical Demand Profile

Graph showing water usage and groundwater over time from 2007 to 2018.
Fixed Charge & Rate Design Considerations

Previously Provided to FSTF
## Existing Rates & Share of Revenue

<table>
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<tr>
<th>Variable Rates ($/AF)</th>
<th>CY 2020 Rates &amp; Charges</th>
<th>CY 2020 Forecasted Revenue</th>
<th>% of Annual Revenue</th>
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<tr>
<td>Melded M&amp;I Supply Rate</td>
<td>$925</td>
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<td>Melded M&amp;I Treatment Rate</td>
<td>$280</td>
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<td>Transportation</td>
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<td>Untreated SAWR¹</td>
<td>$755</td>
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<td>Treated SAWR¹</td>
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<td>Storage</td>
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<td>Supply Reliability</td>
<td>$37.43</td>
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<thead>
<tr>
<th>Other Charges</th>
<th>$52M</th>
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<tr>
<td>Infrastructure Access Charge ($/ME)²</td>
<td>$3.66</td>
<td>$40.5</td>
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<tr>
<td>Standby Availability Charge ($)³</td>
<td>$10</td>
<td>$11.1</td>
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1. Per current Board Policy, SAWR is set to end December 31, 2020.
2. ME means meter equivalent as defined in the resolution establishing the Infrastructure Access Charge.
3. Per parcel or acre, whichever is greater
4. Two year IAC ramp up. CY 2021 IAC forecasted at $4.43. In future years the IAC is forecasted to level.
Fixed Revenues

Millions

- Water Standby Availability Charges
- Property Taxes
- Infrastructure Access Charges
- Customer Service
- Storage
- Supply Reliability Charge
Fixed vs Variable Revenues

- Fixed Charges comprised of Standby Availability, IAC, Property Tax, Customer Service, Storage, & SRC

~$66M (10%) of expenditures are variable (MWD Supply + Treatment). Remaining 90% are largely fixed.
Issues Critical to Fiscal Sustainability

Rate Design Issues

- Special Agriculture Water Rate
- Fixed/Variable Cost Recovery
- Propagation and Occurrence Fixed Charges
  - Infrastructure Access Charge
  - Supply Reliability Charge
- Rate Stability
  - Use of Reserves
  - Reserve Levels
  - Debt Coverage Requirements
  - PayGo vs Debt

Sustainability Concerns

- COS defined Discount (SAWR)
  - Should demands continue to fall, only reliable supply portfolio remains
- Fixed Cost Recovery
  - Increase to Fixed
    - Lower demands = less MWD
  - Impacts of “roll-off”
  - “Fair Share” based on:
    - Today’s needs?
    - Tomorrows needs?
    - Date of implementation?
    - 3, 5, 10 or life of asset?
Objective Measures for Rate Design

Existing Rate Design Bases
- Annual Deliveries
- Historical Rolling Averages
  - 3 and 5 year
- Meter Equivalents

Potential Design Bases
- Peaking Profile
  - Seasonal | Annual | Multi-Year | Max/Min | Day
- Total Demand
  - CWA + Local
- Contractual Arrangements
  - Aligned with Infrastructure
- Voting Entitlement
Prior FSTF Potential Considerations

- Consider Transitioning Transportation Rate to Fixed Charge (3-yr rolling)

- Modify 3-yr rolling average to some other basis (CS, Storage, SRC, Trans)
  - 5-year rolling average
  - 10-year rolling average
  - Peak (max) Annual Take, rather than average
  - Rolling average - with Guaranteed Min (floor)

- Modify Fixed Charges to volumetric (CS, Storage, SRC)

- Define Fixed Cost Recovery Target
  - Adjustment to IAC, including year 2 of Proposed Ramp-Up
  - Adjustment to Stand-By Charge
Discussion & Future Considerations

Goals, Objectives, and Challenges
Rate Design Criteria
Budget & Rate Schedule Policy
Rates & Budget Schedule

- **January - February**
  - Internal Budget Development
  - Operating Departments
  - Capital Improvement Program
  - Equipment Replacement
  - Grants
  - Initiate development of Rate Model
  - Initiate development of Data Inputs
  - Development of Scenarios and Assumptions

- **March**
  - Internal Budget Development
  - Recap of Current Sales
  - Overview of Rate Setting Process
  - MWD CY Proposed Rates
Rates & Budget Schedule

- **April**
  - Internal Budget Development
    - Water Sales
    - Purchases & Treatment
    - Debt Service and Other Expenses
  - Rate Development Process
  - Overview of Annual Cost of Service
  - Prior Year Guidance
  - Preliminary Assumptions

- **May**
  - Recommended Budget
  - Rate Development & COS Review
  - Debt and Cash Optimization
  - Water Demand & Sales Forecast
  - Rater Drivers and Rate Mitigation
  - Rate Recommendation & Guidance

- **June**
  - Budget Workshops
  - Budget Consideration for Adoption
  - Cost of Service Review Process
  - Rate Drivers & Rate Mitigation
  - Rate Recommendations
  - Public Hearing and Consideration for Adoption
Survey of Peer Agencies

- Member Agencies
- Water wholesalers

- Involvement
  - Board/Council
  - Public
  - Departments

- Timeline for development
- Approvals
Discussion & Future Considerations

Goals, Objectives, and Challenges
FSWG Next Steps
FSWG - Next Steps

- Long-Range Financing Plan
  - September Board - Consideration for Adoption - September 23

- September 24, 2021 - Next regular meeting
FINANCIAL STRATEGY WORK GROUP
AGENDA FOR
Monday, September 13, 2021, Meeting #9
8:00 – 9:00 a.m.
Microsoft Teams

Frank Hilliker, Chair          Carlos Lugo          Mona Rios
Gary Arant                   Jim Madaffer        Matt Vespi
Chris Cate                   Marty Miller         Doug Wilson
Mike Hogan

1. Summary of Topics Covered from Meeting #8 (Chair Hilliker)
2. LRFP Follow-up from meetings with City of San Diego staff (Rossum)
3. FSWG Recommendation (All)
4. Schedule & Next Steps (Kerl)
City of San Diego
LRFP Follow-Up

September 9, 2021

Pierce Rossum, Rate and Debt Manager
Today’s Agenda

- Quick Recap of LRFP
  - Policies | Rate Drivers | Provided Sensitivity Analysis
- Overview of Rate Setting Process
- Review of City Requested Sensitivities
  - Additional scenario testing (live)
- LRFP Recommendation & Next Steps
LRFP Recap

Policies | Rate Drivers | Sensitivity Analysis
LRFP Contents

- Financial Policies and Objectives
  - Debt Service Coverage Ratio
  - Reserve Policies
  - Debt and Cash Funding mix
- Regional Water Sales Projections
- Capital Improvement Program and Financing Plan
- Financial Forecast
  - High/Low Projected Rates and Charges
- Funds and Reserves
- Risk Sensitivity Analysis
Key Considerations

- Policy considerations align with prior plans, but have been updated to reflect current financial metrics

- Water Authority worked closely with our Financial Advisors to test and analyze key metrics

- Recommendations have been incorporated into the Recommended LRFP
2021 Recommended LRFP Highlights

Scheduled Board Action - September 23rd

2021 LRFP Recommendation

- **Capital Funding Mix**
  - Targeted 35% Debt / 65% PayGo Funding Mix (nearly inverse of prior 70/30)
  - Two planned debt Issues ($170M in ‘21 and $165M in ’29)
    - Late ‘21 issuance necessary to fund adopted CIP
    - All debt issues will continue to be Board approved, prior to issuance, irrespective of LRFP

- Clarify existing 1.5x Debt Service Coverage Target as “minimum”
  - Existing practice treats 1.5x as a minimum, this would serve to memorialize that practice

- **Target of 150 Days of Cash on Hand (Operating, PayGo, and RSF)**
  - Maintain existing 45 Day Minimum Operating Reserve
  - Maintain existing RSF per Board policy

- **Significant deleveraging**
  - $335M in new money vs $630M in principal payments
Policies Revisions Preserve Management Objectives

Funding Mix Policy
- 2015’s 70/30 reflected use of 2010B proceeds
- New Debt (forecasted for ‘17, ‘20, ‘23) only accounted for 17% of mix
- Recommended Policy (35/65), reflects past practice and current CIP needs and other financial metrics
- Forecasted ‘21 and ’29 issues
- Staff constantly assesses market conditions, funding needs, and cash levels for opportunities provide additional savings or rate relief
- No material impact to overall rate guidance

Debt Coverage Policy
- 2015’s Target 1.5 remains unchanged
- Recommendation is to clarify “Target” as “Minimum Target” - Consistent with existing practices and Rating Agency understanding
- No impact to rate guidance as it follows existing practices
  - Intrinsically balanced with Recommended Funding Mix
- LRFP should not show willingness to go below target (under reasonable conditions)
  - Water Authority Maintains reserves to manage potential rate or cost shocks
LRFP Policies Peripheral Impact to Rate Guidance

Draft High-Low Guidance

Principal Guidance Factors:

- Supply Variability
  - Impacts 76% of revenues
  - Supply | Treatment | Transportation

- Cost of Water
  - MWD Rates (50%)
  - Desal (20%)

- Inflation & Macro Conditions
  - O&M (7% of Budget)
  - CIP (9% of Budget)
Given SDCWA is through the peak of its capital program Fitch expects leverage to trend downward over the next several years. However, preservation of the existing ratings will be highly dependent on leverage declining to around or below 8.0x over the next few years with further improvement thereafter. Greater clarity surrounding the authority's leverage expectations are anticipated following the finalization of its planning documents, including its Urban Water Management Plan (UWMP) and Long-Range Financing Plan (LRFP), by summer 2021.”

-- Fitch Ratings (March ‘21)

- Staff’s LRFP recommendation provides the roadmap to achieving these goals
- Rates & Charges addressed annually to achieve the lowest rates possible, while maintaining financial health
- The Biennial Budget process provides opportunity to review and adjust costs
  - Additional comment period to be incorporated with new Budget & Rate Schedule Policy
Rate Setting
Overview of Rate Setting Process

- Development of preliminary key inputs
  - O&M Budget | Water Sales | CIP | Inflation Rates | Meter Counts | MWD Fixed Charges | Debt Optimization
  - Key inputs not available or finalized until April

- Water Sales relies on January-March rainfall
  - Impacts local surface water levels/use
  - Outdoor domestic and agricultural demands

- MWD Rates presented in Feb/Mar and adopted in April
  - Additional rates adopted in May
Financial Goal:

- Maintain strong credit ratings to achieve greatest interest savings and lowest cost of capital

Rate Framework:

- Minimize rate-payer impacts, while maintaining fiscal responsibility and sustainability using up-to-date metrics

Cost of Service Review:

- Regular review from industry experts to ensure continued compliance and application of rate methodology and adherence to Board policies

Collaborations & Outreach:

- Regular and consistent stakeholder engagement (Board, MAM, FSWG)
- 12+ presentations since January to discuss rates and key financial inputs (rates and charges, budget, CIP, and demands)
Intergenerational Equity

- Intergenerational Equity is one of three Management Objectives
  - Equity balanced around Funding Mix, Coverage, and Reserve Policies

- Recommended 35/65 Funding Mix and adopted ~$1B CIP equates to $65/yr average PayGo
  - Depreciation (~$64M in Fy ‘21) reasonably reflects existing users use/benefit of existing assets

Quotes from the 2021 LRFP

“The cash/debt profile seeks to maintain a level of cash investment into existing (renewal and replacement) and new system assets that both minimizes the Water Authority’s debt and maintains intergenerational equity among ratepayers.”

“Generally Accepted Accounting Principles requires that the Water Authority expense its prior capital expenditures by recording depreciation”
Review of Requested Rate Sensitivities
High-Low Rate Sensitivity Analysis (LRFP Section 8)

- Scenarios balanced around meeting key financial metrics under difference demand and cost conditions

**Baseline Rate Scenario**
- General Shared Assumptions
- Median Demands from Monte Carlo (Q2)
- 10yr adopted CIP
- MWD Rate Increase of 5.3%
- Baseline Desalination Assumptions
- 3% O&M + fill of 4 eliminated positions

**High-Rate Scenario**
- General Shared Assumptions
- Low Demands from Monte Carlo (Q1)
- Approved CIP +10%
- MWD Rate Increase of 7%
- Higher electricity and Intake Costs
- 4% O&M + fill of all eliminated positions

**Low-Rate Scenario**
- General Shared Assumptions
- High Demands from Monte Carlo (Q3)
- Approved CIP -10%
- MWD Rate Increase of 4%
- Baseline electricity and lower intake cost
- 2% O&M + fill of no eliminated positions
Isolated Rate Sensitivities*

- 1% Change in Sales = 0.31% All-In Treated Impact (~$5.5/AF)
  - Impacts Variable Rates (MSR, MTR, Transportation)

- 1% Increase in MWD Rates = 0.52% All-In Treated Impact (~$9/AF)
  - Impacts Variable Rates & Supply Reliability Charge

- 1% Increase in O&M & CIP = 0.18% All-In Treated Impact (~$3/AF)
  - Impacts All Rates & Charges

- Desal Refunding = -0.36% All-In Treated Impact (~$6.5/AF)
  - Impacts Melded Supply Rate

- Detachment = 2.7%-7.2% All-In Treated Impact (~$50/AF - $132/AF)
  - Impacts All Rates & Charges

- Funding Mix = No Net Impact
  - Impacts IAC, a revenue offset, either adds/reduces all other rates (excluding SRC) proportional to IAC impact

* Only applies within normal parameters and may have compounding impacts outside of isolation
MWD Rate Adjustments Plays Largest Role in LRFP Rate Guidance

- Based on LRFP assumptions, MWD is responsible for between 40%-45% of guidance

- Forecasted MWD rates do not reflect full funding of the planned Recycled Water Program, Delta Conveyance, or lowering of sales assumptions
Recommendation & Next Steps
2021 Recommended LRFP Highlights

Scheduled Board Action - September 23rd

2021 LRFP Recommendation

- Capital Funding Mix
  - Targeted 35% Debt / 65% PayGo Funding Mix (nearly inverse of prior 70/30)
  - Two planned debt Issues ($170M in ‘21 and $165M in ’29)
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  - Maintain existing RSF per Board policy

- Significant deleveraging
  - $335M in new money vs $630M in principal payments
Lake Hodges Rehabilitation

- Discussion on Lake Hodges Dam Rehabilitation
  - Comments from Director Cate and others to remove project from CIP
    - Concerns of cost, timing, and CWA benefit
  - Currently in the 10-yr CIP based on City provided cost and schedule inputs
    - Costs shared 50/50 based on existing agreements
  - Jim Fisher provided Board presentation on Hodges in August
Attention: Administrative and Finance Committee

Adopt the Water Authority’s 2021 Long-Range Financing Plan.  (Action)

Staff Recommendation
Adopt the Water Authority’s 2021 Long-Range Financing Plan.

Alternatives
Do not adopt the Water Authority’s 2021 Long-Range Financing Plan.

Fiscal Impact
There is no fiscal impact with adopting the 2021 Long-Range Financing Plan (LRFP). The 2021 Long-Range Financing Plan is a plan of finance and will guide the Water Authority’s long-term financial planning over the next 10 years.

Background
On January 28, 2016, the Board adopted the Water Authority’s 2015 LRFP. The 2015 LRFP focused on the Water Authority’s transition to operations and asset management. At the time, the Capital Improvement Program (CIP) forecasted a modest 10-year spending plan primarily focused on asset management and pipeline relining projects. The region was faced with drought regulations and reductions in water demand levels.

While the LRFP is an important communications document for a wide range of stakeholders, the primary intended audience is investors and rating agencies. Aimed at investors and rating agencies, the document focuses on key financial policies, projected future capital expenditures and debt issuances, revenues and expenditures, and financial performance metrics and risks facing the Water Authority. However, to make the document as accessible as possible to the widest range of stakeholders a detailed discussion is provided on key aspects of the Water Authority’s operations.

A Draft 2021 LRFP was presented to the A&F Committee on August 12, 2021, at a Special A&F Committee meeting. The Recommended 2021 LRFP was presented to the A&G Committee on August 26, 2021.

Previous Board Action: On January 28, 2016, the Board adopted the 2015 Long-Range Financing Plan.

Discussion
The 2021 LRFP is focused on the Water Authority’s continued long-term asset management. The current $982 million 10-year CIP is an increased spending level when compared to the 2015 LRFP. CIP projects included in this plan are primarily Asset Management and Relining Projects. The projected CIP was reviewed and evaluated by the Financial Strategy Work Group as well as the
previous Fiscal Sustainability Task Force. Additional considerations in the planning horizon are the forecasted water sales demand and verifiable local supply development.

While there are a large number of assumptions embedded in the 2021 LRFP, the core assumptions are those that have significant financial impacts and include water sales, local supplies, cost of water and transportation, capital construction costs, and operating increases. At the Special A&F Committee meeting on August 12, 2021, staff provided a detailed overview of the draft LRFP. During that presentation a review of the LRFP, its uses and audience was provided. In addition, considerations and recommendations from the Water Authority’s financial advisors were provided. The three funding mix scenarios presented included a one-debt issuance option, a two-debt issuance option, and a three-debt issuance option within the 10-year planning horizon. The scenarios also included forecasted high and low rates and charges. The Draft 2021 LRFP provided for the August 12 meeting included all three scenarios for consideration. The Recommended 2021 LRFP was provided to the Board on August 26, 2021. At the August 26, 2021, A&F Committee meeting, staff provided a follow up to questions from the Special A&F Committee meeting and a discussion on the high/low rate guidance development.

The 2021 LRFP incorporates the two-debt issuance option, with a $170 million issuance occurring in Fiscal Year 2022 and a $165 million issuance in Fiscal Year 2029. The baseline assumption of two-debt issuances is used to develop financial projections presented in the 2021 LRFP. Board and member agency feedback has also been incorporated into the assumptions for the 2021 LRFP. The 2021 LRFP also includes a recommended change to the long-term capital funding target mix. The recommended target mix update is discussed below.

**Long-Term Funding Target Mix**

The projected CIP has a primary focus on asset management, with facility rehabilitation or replacement of existing assets that have been in service for a long time to the benefit of existing customers. Given the Water Authority’s existing financial makeup, the recommended change to the debt to cash (PAYGO) funding target is a significant decrease of debt funding from the prior 70% down to 35% and an increase to PAYGO funding from the prior 30% to 65%. Funding projects with a mix of debt and PAYGO helps balance intergenerational equity.

The 2021 LRFP is comprised of several sections. A description of each section is provided below.

- **Executive Summary**: Highlights the key enhancements of this LRFP update and provides a brief summary of each section.
- **Financial Management Objectives and Policies**: Describes Water Authority capital financing and reserve policies and credit ratings from Standard & Poor’s, Fitch Ratings, and Moody’s Investor Service.
- **Regional Water Sales Projections**: Details the Water Authority’s long-term water sales forecast, which reflects the long-term impacts of local supply development.
• **Capital Improvement Plan:** Sets forth the Water Authority’s CIP, highlighting its progression over time and summarizing the current $1.5 billion CIP by project category and status, and outlining the 10-year forecasted CIP of $982 million.

• **Capital Financing Plan:** Elaborates on the Water Authority’s capital financing plan including the debt instruments used to finance the CIP. It discusses the methodology used to optimize the financing mix, and provides detail on outstanding Water Authority debt and all future debt and cash necessary to completely fund the Water Authority’s CIP.

• **Water Authority Financial Forecast:** Outlines the overall feasibility of the Water Authority’s capital financing plan and includes high and low rate forecasts. The ten-year projection of sources and uses of funds incorporates the impact of all debt projected to be issued during the planning period and demonstrates that the CIP can be implemented with manageable long-term growth in water rates.

• **Funds and Reserves:** Provides information on the Water Authority’s seven major operating and capital funds, their authorized uses, Board-approved funding policies, and projected cash balances. The projections demonstrate that the Water Authority will have sufficient liquidity to meet both its operating and CIP commitments.

• **Sensitivities:** Analyzes the Water Authority’s financial and rate exposure to variability in certain underlying assumptions. It provides detail regarding the potential impact of water sales variability; changes in MWD rate increase; variability in CIP funding needs; and various escalation and staffing scenarios.

• **Appendices:** Details the Water Authority’s bonded debt as well as its non-bonded obligations (including post-employment obligations for pension and retiree healthcare benefits) and contains the full text of the Water Authority’s Debt Management and Investment policies.

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**2021 LRFP Review Process**

The review process has been structured to provide opportunities for member agency review and input at both the staff and Board levels. The following are both past and planned meetings.

- **June 29, 2021 – Financial Strategy Work Group Meeting** – development schedule, overview, credit ratings, CIP, water demand, and MWD rate forecasts presented for review, discussion and input
- **July 8, 2021 – Special Member Agency Managers and Finance Officers Meeting** – development schedule, overview, credit ratings, CIP, water demand, and MWD rate forecasts presented for review, discussion and input
- **July 12, 2021 – Financial Strategy Work Group Meeting** – review and discussion of CIP, credit review, capital funding sensitivity, water demand sales forecast and MWD rate forecast, and discussion of preliminary results for review and input
- **July 13, 2021 – Member Agency Managers Meeting** – review and discussion of CIP, credit review, capital funding sensitivity, water demand sales forecast and MWD rate forecast, and discussion of preliminary results for review and input
- **July 22, 2021 – Administrative and Finance Committee** – update on preliminary development of 2021 LRFP
• July 28, 2021 – City of San Diego Staff – member agency requested review with Water Authority staff
• July 30, 2021 – Financial Strategy Work Group Meeting – guidance from financial advisors, development of baseline scenario, general assumptions, one, two, and three debt issuance scenarios, water demand forecast (high/low) for review, discussion, and input
• August 9, 2021 – Helix Water District Staff – member agency review with Water Authority staff
• August 12, 2021 – Special A&F Committee Meeting – review and discussion of the Draft 2021 LRFP and optional scenarios
• August 26, 2021 – A&F Committee Meeting – present and discuss the Recommended 2021 LRFP
• September 1, 2021 – City of San Diego Staff – member agency review with Water Authority staff
• September 7, 2021 – City of San Diego Staff – member agency review with Water Authority staff
• September 9, 2021 – City of San Diego Staff – member agency review with Water Authority staff
• September 13, 2021 – Financial Strategy Work Group Meeting – follow-up regarding 2021 LRFP meetings with City of San Diego Staff
• September 23, 2021 – Board Meeting – consideration for adoption of the Recommended 2021 LRFP

**Additional Amendments for 2021 Long-Range Financing Plan**

After meeting with the Financial Strategy Work Group and staff from member agencies, the Water Authority is proposing additional amendments to the 2021 LRFP. The amendments are described below and will be incorporated into the final adopted 2021 LRFP.

**Affordability**

The Water Authority’s long-term financial management, including budgeting, rate setting, and rate guidance continue to aim for long-term affordability for member agencies and ratepayers. During Fiscal Years 2020 and 2021 the Water Authority’s debt management strategy saved ratepayers across the region approximately $130 million due to the execution of five tax-exempt and taxable refundings of outstanding debt. During this same period, the Water Authority implemented mid-term budget savings, to save approximately $44.5 million in Fiscal Year 2021. This was done through coordinated efforts of deferring capital projects, rescheduling equipment replacement, and maintaining vacant staff positions.

For Fiscal Years 2022 and 2023 the Water Authority continued these efforts with the development of the two-year budget. The Fiscal Years 2022 and 2023 Adopted Budget includes the elimination of 7 full-time equivalents, along with a reduction in outside services and minimized travel. In addition, equipment and capital projects were evaluated for potential deferrals to minimize the impact of day-to-day operations. With the consideration for savings, the budget for Fiscal Years 2022 and 2023 is an overall 0% change from the prior two-year period. The Water Authority will continue to evaluate for savings throughout the budget period.
During Winter 2020 and throughout 2021, the Water Authority has played a leadership role in advocating for a state framework for distribution of state and federal funds allocated for water and wastewater bill debt relief associated with the COVID pandemic. Ratepayers throughout California have amassed nearly $1 billion in water and wastewater bill debt as a result of economic impacts associated with the COVID pandemic – more than $50 million in water and wastewater arrearages has accrued in San Diego County alone. Partnering closely with our industry associations and water supplier colleagues throughout the state and San Diego region, the Water Authority was actively engaged in the successful efforts to secure $985 million in water and wastewater bill debt relief through the State Budget, along with the establishment of a statutory framework and structure to allocate those funds directly to water suppliers to offset water bill debt beginning in November 2021.

Additionally, the Water Authority was actively engaged throughout the 2021 legislative session on SB 222 by Senator Bill Dodd, a measure intended to create a statewide framework for a low-income water rate assistance program. On an ongoing basis, nearly one-third of the state’s water ratepayers struggle with their ability to pay water bills on a month-to-month basis, and SB 222 would create a statutory framework and structure to ensure that those in need of water rate assistance are afforded the opportunity to receive the financial support necessary from the state. The Water Authority was an early supporter of the low-income water rate assistance program concept within the water supplier community, and has actively engaged to ensure the program is properly structured and funded to provide meaningful benefits to water ratepayers.

While the Water Authority works diligently to control and manage its own costs, it has little control over MWD costs, which account for almost half the Water Authority’s overall supply cost. MWD’s long-range finance plan has not been updated since 2004. MWD staff states that its 10-year rate forecast included in its biennial budget document serves the purpose of a long-range finance plan. However, MWD’s current 10-year forecast does not include projected capital costs of planned, multi-billion-dollar projects MWD has identified as necessary to support its long-term water supply reliability, including a Bay Delta fix and a regional recycled water program. While annual MWD water sales have declined by more than 500,000 acre-feet since 2010, MWD has not materially adjusted its budgets to address the impact of reduced water sales. For Fiscal Year 2021, despite lower than budgeted water sales, MWD ended the year with a net revenue increase of $193.7 million, allowing the addition of $146.9 million to its unrestricted reserves during the COVID-19 pandemic.

MWD recently appointed Adel Hagekhalil as its new General Manager. The Water Authority and its four MWD board representatives are working with the new General Manager and other member agencies seeking reform of these past practices in order to provide a sustainable, resilient and affordable water supply for all MWD member agencies and their customers. While the Water Authority has significantly reduced its dependence on MWD water, it has a substantial investment and abiding interest in MWD’s future success. During the current biennial budget cycle, the Water Authority was instrumental in working with other MWD member agencies to impose a first ever moratorium on non-emergency spending, generally allowed previously, which had caused MWD to shift its PAYGo use and issue unplanned debt.
The Water Authority is also actively engaged in a newly formed MWD Member Agency Underserved Communities Caucus, to advocate water supply affordability and stewardship programs in order to address Southern California underserved communities’ needs.

Debt Service Reserve
The 2021 LRFP clarifies current practice and does not assume debt service reserves for either of the projected debt issuances in the ten-year period. The Water Authority adjusted assumptions for interest rates related to assumed issued debt. However, a debt service reserve fund was created for the 2019 Pipeline Bonds. This reserve is forecasted to increase annually to match the structure of the debt payments.

Low-Rate Forecast Guidance
The low-rate forecast guidance has been updated from the Recommended LRFP to include a desalination plant refunding. The previous Recommended LRFP did not account for any future refundings due to the speculative nature of refunding. In 2022, Aberdeen, in consultation with the Water Authority, will have an opportunity to refund its desalination plant debt. This refunding was included per the recommendation from a member agency. As such, the Water Authority’s unit cost of water for desal could benefit. Given the speculative nature and potential changes to market conditions or credit rating (Water Authority credit ratings included), no savings were assumed in the baseline or high-rate guidance. The low-rate guidance now includes significant forecasted savings for the desalination plant refunding, over the term of the bond, applied per the Water Purchase Agreement.

Lake Hodges Dam Rehabilitation Project
Planning work for the rehabilitation/replacement of Lake Hodges Dam is in its early stages. Preliminary budget numbers for the Water Authority’s share of the project costs have been included in the Board approved multi-year plan for the CIP as well as the draft Long-Range Financing Plan. These preliminary budget numbers will be modified as the planning work progresses, and cost estimates are further refined. As requested at the August 26, 2021, A&F Committee meeting, the City of San Diego and the Water Authority will give a joint presentation on the Lake Hodges Dam and the rehabilitation project at the October 2021 Board meeting.

Any further changes discussed or recommended by the Board will be incorporated into the final adopted document.

Following the completion of the 2021 LRFP, the Financial Strategy Work Group will continue to evaluate the financial stability of the Water Authority, including a review of the Water Authority’s rate structure.

Prepared by: Liana M. Whyte, Budget & Treasury Manager
Pierce Rossum, Rate & Debt Manager
Reviewed by: Lisa Marie Harris, Director of Finance/Treasurer
Approved by: Tish Berge, Assistant General Manager
September 15, 2021

Attention: Administrative and Finance Committee

Report on General Manager-awarded purchase orders and contracts for goods and services above $10,000. (Information)

Purpose
This information item complies with the reporting requirements of the Water Authority’s Administrative Code for General Manager-awarded goods and services above $10,000 not previously approved by the Board for the period of July 1, 2020 through June 30, 2021.

Background
The Water Authority’s Administrative Code (Code) Chapters 4.04 and 4.08 establish the general provisions to be followed for competitive acquisition of goods and services, reporting requirements, and signature authority limitations. The Code requires that an annual report be submitted to the Board listing all General Manager-awarded purchase orders and contracts for goods and services greater than $10,000 not previously approved by the Board.

Discussion
The General Manager’s signature authority of $150,000, authorized by section 4.04.020 of the Code, applies to competitive procurements as well as the following three exceptions to competition:

1. “Sole Source” procurements [section 4.04.140] may be authorized when only one vendor possesses the unique capability to meet the requirements of the solicitation, such as technical qualifications matching to currently owned equipment or supplies, or the ability to deliver at a particular time.
2. “Special Circumstances” procurements [section 4.04.060] may be authorized when the General Manager, in consultation with the General Counsel, determines in writing, that implementation of the competitive acquisition process is infeasible, impractical, or otherwise not in the best interest of the Water Authority.
3. “Specialized and Professional Service” procurements [section 4.04.060], such as services rendered by appraisers, attorneys, accountants, auditors, economists, financial advisors, and lobbyists, may be authorized if the General Manager or General Counsel determines the contract is in the best interest of the Water Authority.

The General Manager may exceed the signature authority under the following conditions:

1. In furtherance of the pipeline inspection program and to maintain system reliability, the General Manager may award and execute contracts in excess of $150,000 for either (a) work during the period of the annual pipeline shutdown to repair or correct a condition discovered during the shutdown, or (b) repair or relining work to an area of pipeline at which the electronic pipeline monitoring systems indicate a condition requiring an urgent response [sections 4.04.020 and 4.08.040]. The General Manager shall report to the Board the details of the condition and of the repair or corrective action not later than seven days after the
discovery of the condition requiring repair or correction, or at its next regularly scheduled meeting, if that meeting will occur not later than 14 days after the action. Any contract in excess of $250,000 for goods and services or $500,000 for public works is subject to ratification by the Board at its first regular meeting following the discovery of the condition.

2. In an emergency, as defined by section 2.04.050(e), the General Manager may award and execute contracts in excess of $150,000 provided that the goods and services are of an urgent nature, directly and immediately required by the emergency [sections 4.04.030 and 4.08.040]. The General Manager shall report to the Board not later than seven days after the emergency action or at its next regularly scheduled meeting, if that meeting will occur not later than 14 days after the action, the details of the emergency and reasons justifying the actions taken. Any contract having a value more than $250,000 for goods and services or $500,000 for public works shall be subject to ratification by the Board at its first regular meeting following the onset of the emergency.

3. When the original contract amount is more than $150,000, the General Manager is authorized to issue amendments to contracts up to a cumulative total of $150,000 or 10 percent of the original contract amount, whichever is greater [sections 4.04.040 and 4.08.040]. The cumulative sum of all amendments that have not been previously approved by the Board may not exceed $250,000 for goods and services or $500,000 for public works. When the cumulative sum of amendments to a contract would exceed the limits noted above, a report of such amendments will be presented to the Board at its next regular meeting. Upon acceptance of the amendments by the Board, the General Manager shall have additional authorization to issue amendments as if the original contract amount were the total of the original amount and all accepted amendments.

4. The General Manager is authorized to enter into contracts greater than $150,000 for the purchase of goods and services available through a cooperative purchasing agreement provided: (a) goods and services to be purchased were approved in the budget, and (b) the cooperative purchasing agreement being utilized was awarded as a result of a competitive pricing procedure containing a public agency clause [section 4.04.150].

5. The General Manager may enter into contracts with a federal, state or local agency, including public educational institutions, for the performance of landscaping, refuse removal, and surface maintenance of Water Authority rights-of-way through labor provided by inmates, community service workers, students and other persons under work programs established and supervised by the federal, state or local agency provided that the contract does not exceed $250,000 per year [section 4.08.110].
The attached reports list procurements above $10,000 that were not previously approved by the Board. Attachment 1 lists service contracts and amendments; Attachment 2 lists purchase orders issued for materials, supplies, equipment and miscellaneous services. The accumulated totals for each report are $3,623,844 and $2,199,085 respectively, for a total of $5,822,929. Both reports are for the period of July 1, 2020 through June 30, 2021.

The Administrative Services Department accounted for the largest proportion of contract and amendment transactions ($792,989) in fiscal year 2021, as indicated in Chart A below. This was primarily due to the lease for agency-wide multi-function devices (copiers/printers/scanners), information technology maintenance and upgrade services, and Kearny Mesa office maintenance services such as HVAC, janitorial, and landscaping.
The Operations and Maintenance Department accounted for the largest proportion of purchase order expenditures ($1,065,652), as indicated in Chart B below. The majority of these expenditures are attributable to software and equipment maintenance and replacement for the Supervisory Control and Data Acquisition (SCADA) and Security systems.

Prepared by: Jackie Carmona, Administrative Services Manager
Reviewed by: Jason Foster, Director of Administrative Services
Approved by: Tish Berge, Assistant General Manager

Attachments:
Attachment 1 – Contracts and Amendments above $10,000 not Board approved
Attachment 2 – Purchase Orders above $10,000 not Board approved
### ADMINISTRATIVE SERVICES

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
<th>Original Contract Term</th>
<th>Original Contract Amount&lt;br&gt;(Bold indicates Board approved)</th>
<th>Amend No(s.)</th>
<th>Contract/Amendment Information</th>
<th>Revised Contract End Date</th>
<th>Amount Above $10K Added FY2021 (not Board-approved)</th>
<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AO Reed &amp; Co</td>
<td>Plumbing Services for Kearny Mesa Headquarters</td>
<td>Competitive</td>
<td>6/14/2021-6/30/2021</td>
<td>$11,360</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$11,360</td>
<td>$11,360</td>
</tr>
<tr>
<td>Ace Janitorial Services</td>
<td>Janitorial services for Kearny Mesa and Escondido offices</td>
<td>Competitive</td>
<td>8/26/2020-8/31/2021</td>
<td>$78,600</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$78,600</td>
<td>$78,600</td>
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<tr>
<td>Belfor USA Group Inc</td>
<td>Environmental Restoration Services</td>
<td>COOP - Cooperative Agreement</td>
<td>7/9/2020-6/30/2022</td>
<td>$50,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Digital Telecommunication Corp</td>
<td>Telephone System Maintenance</td>
<td>Special Circumstances: Vendor completed WA phone upgrade. Most practical and feasible option for ongoing maintenance.</td>
<td>12/3/2020-12/31/2021</td>
<td>$15,130</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$15,130</td>
<td>$15,130</td>
</tr>
<tr>
<td>Digital Telecommunication Corp</td>
<td>Paging System for Kearny Mesa Headquarters</td>
<td>Competitive</td>
<td>6/14/2021-6/30/2021</td>
<td>$47,673</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$47,673</td>
<td>$47,673</td>
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<td>Gimmal LLC</td>
<td>Software subscription</td>
<td>Exempt per Admin Code</td>
<td>6/17/21-6/30/21</td>
<td>$21,600</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$21,600</td>
<td>$21,600</td>
</tr>
<tr>
<td>Illumant LLC</td>
<td>Cyber security assessment</td>
<td>Special Circumstances: Due to security concerns, using vendor who has performed past 2 assessments allows for consistent comparison</td>
<td>5/18/21-6/11/22</td>
<td>$32,700</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$32,700</td>
<td>$32,700</td>
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<tr>
<td>Contractor Name</td>
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<tr>
<td>------------------------</td>
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</tr>
<tr>
<td>Kirk Paving Inc</td>
<td>Asphalt sealcoat application services for Kearny Mesa public parking lot</td>
<td>Competitive</td>
<td>5/13/21-6/30/21</td>
<td>$18,968</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$18,968</td>
<td>$18,968</td>
</tr>
<tr>
<td>Marsh &amp; McLennan Agency LLC</td>
<td>OCIP Phase II Closeout</td>
<td>Special Circumstances</td>
<td>12/18/2018-6/30/2020</td>
<td>$9,000</td>
<td>1</td>
<td>Term extended and amount revised</td>
<td>6/30/2025</td>
<td>$12,500</td>
<td>$21,500</td>
</tr>
<tr>
<td>Naturescape Services Inc</td>
<td>Landscape Maintenance Services - Kearny Mesa</td>
<td>Competitive</td>
<td>10/22/2020-10/31/21</td>
<td>$20,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>ShareSquared Inc</td>
<td>Sharepoint Support Services</td>
<td>Special Circumstances: Consultant implemented original taxonomy package and can customize it cost effectively</td>
<td>5/26/2021-10/31/2021</td>
<td>$27,769</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$27,769</td>
<td>$27,769</td>
</tr>
<tr>
<td>Southland Technology Inc</td>
<td>Audio/Visual Upgrades of Four Conference Rooms, including Teams compatibility</td>
<td>Special Circumstances: Due to extraordinary lead times for AV parts given the pandemic, four quotes were solicited on an expedited timeline. Southland was lowest bidder.</td>
<td>06/14/2021-06/30/2021</td>
<td>$55,629</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$55,629</td>
<td>$55,629</td>
</tr>
<tr>
<td>Trane</td>
<td>HVAC Maintenance Services for Kearny Mesa Office</td>
<td>Competitive</td>
<td>10/01/2017-09/30/2020</td>
<td>$100,000</td>
<td>2</td>
<td>Scope of work change, term extended and amount revised</td>
<td>9/30/2022</td>
<td>$50,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Vector Resources Inc</td>
<td>Security Camera Installation</td>
<td>COOP - Cooperative Agreement</td>
<td>06/28/2021-07/30/2021</td>
<td>$50,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
</tbody>
</table>
# ATTACHMENT 1: CONTRACTS AND AMENDMENTS ISSUED (Above $10,000 not Board Approved)

**BETWEEN JULY 1, 2020 - JUNE 30, 2021**

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
<th>Original Contract Term</th>
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<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vortex Industries Inc</td>
<td>New Glass and Aluminum Storefront for Kearny Mesa Office</td>
<td>Competitive</td>
<td>05/24/2021-06/30/2021</td>
<td>$26,567</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$26,567</td>
<td>$26,567</td>
</tr>
<tr>
<td>Xerox Corporation</td>
<td>Lease of Xerox Equipment for Water Authority Offices</td>
<td>COOP - Cooperative Agreement</td>
<td>5/22/2015-5/21/2020</td>
<td>$428,968</td>
<td>3-5</td>
<td>Amount revised and term extended; previous amendment added $10K in FY20</td>
<td>3/31/2021</td>
<td>$15,000</td>
<td>$453,968</td>
</tr>
<tr>
<td>Xerox Corporation</td>
<td>Lease of Xerox Equipment for Water Authority Offices</td>
<td>COOP - Cooperative Agreement</td>
<td>3/23/2021-3/31/2026</td>
<td>$259,493</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$259,493</td>
<td>$259,493</td>
</tr>
</tbody>
</table>

**COLORADO RIVER PROGRAM**

<table>
<thead>
<tr>
<th>Contractor Name</th>
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<tbody>
<tr>
<td>Libra Ingenieros Civiles S.A. DE C.V.</td>
<td>Colorado River Basin/Binational Issues Support</td>
<td>Specialized &amp; Professional Services: Contractor has unique experience and background regarding Colorado River Basin and binational issues.</td>
<td>11/12/2020-6/30/2021</td>
<td>$48,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$48,000</td>
<td>$48,000</td>
</tr>
</tbody>
</table>

**ENGINEERING**

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
<th>Original Contract Term</th>
<th>Original Contract Amount</th>
<th>Amend No(s)</th>
<th>Contract/Amendment Information</th>
<th>Revised Contract End Date</th>
<th>Amount Above $10K Added FY2021 (not Board-approved)</th>
<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH2M Hill Engineers Inc</td>
<td>Mission Trails FRS&amp;FCF Design</td>
<td>Competitive</td>
<td>12/31/2017-12/31/2021</td>
<td>$1,870,629</td>
<td>3</td>
<td>Term extended and amount revised</td>
<td>4/30/2022</td>
<td>$176,696</td>
<td>$2,047,325</td>
</tr>
</tbody>
</table>

**Total for Administrative Services**

$792,989

**Total for Colorado River Program**

$48,000
<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
<th>Current Contract Term</th>
<th>Original Contract Amount (Bold indicates Board approved)</th>
<th>Amend No(s.)</th>
<th>Contract/Amendment Information</th>
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<th>Amount Above $10K Added FY2021 (not Board-approved)</th>
<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eagles Point Security</td>
<td>Security Services Mission Trails</td>
<td>Special Circumstances: Security services at Mission Trails project to assist with safety/security-concerns; standard acquisition process not in WA’s best interest.</td>
<td>04/08/2021-04/30/2022</td>
<td>$49,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$49,000</td>
<td>$49,000</td>
</tr>
<tr>
<td>Field Automated Communication Systems</td>
<td>Software Subscription FACS</td>
<td>Exempt per Admin Code</td>
<td>07/06/2020-06/30/2022</td>
<td>$47,850</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$47,850</td>
<td>$47,850</td>
</tr>
<tr>
<td>Gracon LLC</td>
<td>Rancho Peñasquitos Hydroelectric Facility Improvements</td>
<td>Competitive</td>
<td>07/31/2019-06/25/2021</td>
<td>$4,280,000</td>
<td>3-4</td>
<td></td>
<td>9/30/2022</td>
<td>$58,957</td>
<td>$4,338,957</td>
</tr>
<tr>
<td>LG2WB Engineers Inc</td>
<td>Traffic Control Design Services</td>
<td>Competitive</td>
<td>03/04/2021-06/30/2024</td>
<td>$139,535</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$139,535</td>
<td>$139,535</td>
</tr>
<tr>
<td>The Bodhi Group Inc</td>
<td>Environmental Services</td>
<td>Competitive</td>
<td>10/20/2016-09/30/2021</td>
<td>$90,000</td>
<td>1</td>
<td></td>
<td>9/30/2022</td>
<td>$15,000</td>
<td>$105,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Scope of work change, term extended and amount revised</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total for Engineering** $487,038
## ATTACHMENT 1: CONTRACTS AND AMENDMENTS ISSUED

**BETWEEN JULY 1, 2020 - JUNE 30, 2021**

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
<th>Original Contract Amount (Bold indicates Board approved)</th>
<th>Amend No(s)</th>
<th>Contract/Amendment Information</th>
<th>Revised Contract End Date</th>
<th>Amount Above $10K Added FY2021 (not Board-Approved)</th>
<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINANCE DEPARTMENT</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital Assurance Certification LLC</td>
<td>Disclosure Dissemination Agent</td>
<td>Special Circumstances: DAC provides both dissemination and repository services for the Water Authority's continuing disclosure obligation.</td>
<td>$12,500</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$12,500</td>
<td>$12,500</td>
</tr>
<tr>
<td>Questica Ltd</td>
<td>PowerPlan Maintenance Agreement</td>
<td>Sole Source: Questica is the vendor for our budget software. They are the only company that can provide technical support for the software.</td>
<td>$25,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
<tr>
<td><strong>GENERAL MANAGER’S OFFICE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juanita C Hayes</td>
<td>Advisory &amp; Consulting Services</td>
<td>Specialized &amp; Professional Services - Ms. Hayes has substantial experience managing community and stakeholder initiatives.</td>
<td>$258,000</td>
<td>1</td>
<td>Amount revised and term extended</td>
<td>6/30/2022</td>
<td>$90,000</td>
<td>$348,000</td>
</tr>
<tr>
<td><strong>GOVERNMENT RELATIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California Strategies &amp; Advocacy, LLC</td>
<td>Advocacy Services</td>
<td>Competitive</td>
<td>$150,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$150,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Lang Hansen Giroux &amp; Kidane</td>
<td>Advocacy Services</td>
<td>Competitive</td>
<td>$150,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$150,000</td>
<td>$150,000</td>
</tr>
</tbody>
</table>

**Total for Finance**                  | **$** 37,500                         |                                   |                                                         |            |                               |                           |                                                      |                          |

**Total for General Manager’s Office**  | **$** 90,000                         |                                   |                                                         |            |                               |                           |                                                      |                          |

**Total for Government Relations**     | **$** 300,000                        |                                   |                                                         |            |                               |                           |                                                      |                          |
## HUMAN RESOURCES

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
<th>Original Contract Term</th>
<th>Original Contract Amount <em>(Bold indicates Board approved)</em></th>
<th>Amend No(s.)</th>
<th>Revised Contract/Amendment Information</th>
<th>Revised Contract End Date</th>
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<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>34th Street Inc.</strong></td>
<td>Organizational Support Services: Vendor previously assisted with organizational support and personnel management services and can best assist with ongoing, follow-up services</td>
<td></td>
<td>3/25/2021-1/31/2024</td>
<td>$50,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$50,000</td>
<td><strong>$50,000</strong></td>
</tr>
<tr>
<td><strong>Capstone Fire Management Inc.</strong></td>
<td>Standby Confined Space Rescue</td>
<td>Competitive</td>
<td>8/26/2020-8/31/2021</td>
<td>$100,000</td>
<td>3-4</td>
<td>Amend No. 3 added $150K; Amend No. 4 extended term; previous amendments adding $170K were Board approved</td>
<td>44255</td>
<td>$150,000</td>
<td>$420,000</td>
</tr>
<tr>
<td><strong>Industrial Scientific Corporation</strong></td>
<td>Lease Air/Gas detection equipment and monitoring system: Vendor is the only company that offers this type of lease program for required air/gas monitors.</td>
<td>Special Circumstances</td>
<td>11/1/2015-10/31/2019</td>
<td>$124,658</td>
<td>5</td>
<td>Amount revised and term extended; previous amendments adding $69,240 were Board approved</td>
<td>12/31/2020</td>
<td>$11,773</td>
<td>$205,671</td>
</tr>
<tr>
<td>Contractor Name</td>
<td>Contract Description</td>
<td>Procurement Type</td>
<td>Original Contract Term</td>
<td>Original Contract Amount (Bold indicates Board approved)</td>
<td>Amend No(s.)</td>
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</tr>
<tr>
<td>-------------------------------------</td>
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<td>--------------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Industrial Scientific Corporation</td>
<td>Lease Air/Gas detection equipment and monitoring system</td>
<td>Special Circumstances: Vendor is the only company that offers this type of lease program for required air/gas monitors.</td>
<td>1/5/2021-10/31/2023</td>
<td>$146,175</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$146,175</td>
<td>$146,175</td>
</tr>
<tr>
<td>Keren Stashower</td>
<td>Organizational Support Services</td>
<td>Specialized and Professional Services: Vendor assisted with prior employee engagement survey and is now providing services for the current survey as well as the values development process.</td>
<td>2/9/2021-12/31/2023</td>
<td>$150,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$150,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Michael Quinn DBA HireMilitary, Inc.</td>
<td>SkillBridge Intern Recruiting Program</td>
<td>Exempt per Admin Code</td>
<td>6/18/2021-6/30/2023</td>
<td>$30,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$30,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>MxGlobal Inc.</td>
<td>COVID-19 Testing</td>
<td>Emergency: Board of Directors declared COVID-19 an emergency. MxGlobal provides onsite or drive-thru diagnostic screenings for employees as required by Cal/OSHA.</td>
<td>1/12/2021-3/11/2021</td>
<td>$30,000</td>
<td>1</td>
<td>Term extended</td>
<td>12/31/2021</td>
<td>$30,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Sharp Rees Stealy Medical Group Inc.</td>
<td>Occupational health services</td>
<td>Competitive</td>
<td>8/24/2017-9/30/2018</td>
<td>$25,000</td>
<td>3</td>
<td>Amount revised and term extended; previous amendment in FY19 added $10K</td>
<td>9/30/2022</td>
<td>$10,000</td>
<td>$45,000</td>
</tr>
<tr>
<td>Contractor Name</td>
<td>Contract Description</td>
<td>Procurement Type</td>
<td>Original Contract Term</td>
<td>Original Contract Amount (Bold indicates Board approved)</td>
<td>Amend No(s.)</td>
<td>Contract/Amendment Information</td>
<td>Revised Contract End Date</td>
<td>Amount Above $10K Added FY2021 (not Board-approved)</td>
<td>Cumulative Contract Total</td>
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<td>-----------------------------</td>
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<td>--------------------------</td>
</tr>
<tr>
<td>iGrad Inc.</td>
<td>Saas Platform for Water Authority and member agencies - Financial Literacy (Grant Funds)</td>
<td>Exempt per Admin Code</td>
<td>12/14/2020-11/30/2023</td>
<td>$16,500</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$16,500</td>
<td>$16,500</td>
</tr>
</tbody>
</table>

### OPERATIONS AND MAINTENANCE

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
<th>Original Contract Term</th>
<th>Original Contract Amount (Bold indicates Board approved)</th>
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<th>Amount Above $10K Added FY2021 (not Board-approved)</th>
<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Innovations Limited</td>
<td>Monitor Cathodic Protection of Facilities</td>
<td>Special Circumstances - The remote monitoring system used by the WA is proprietary to Vendor and is needed for continued monitoring services.</td>
<td>9/20/2017-6/30/2019</td>
<td>$50,000</td>
<td>2</td>
<td>Payment and Fee Schedule change, amount revised and term extended; previous amendment added $30K in FY19</td>
<td>6/30/2023</td>
<td>$50,000</td>
<td>$130,000</td>
</tr>
<tr>
<td>Bob Turner's Crane Service Inc</td>
<td>Crane Rental with Operator Service</td>
<td>Open Competition</td>
<td>10/26/2020-10/31/2022</td>
<td>$150,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$150,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Compressed Air Systems Engineering Inc</td>
<td>Air Compressor Repair</td>
<td>Special Circumstances - Compressed Air Systems is the sole authorized dealer for SD County for the air compressor</td>
<td>7/30/2020-10/30/2020</td>
<td>$12,872</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$12,872</td>
<td>$12,872</td>
</tr>
</tbody>
</table>

**Total for Human Resources** $594,448
## ATTACHMENT 1: CONTRACTS AND AMENDMENTS ISSUED (Above $10,000 not Board Approved)
### BETWEEN JULY 1, 2020 - JUNE 30, 2021

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
<th>Original Contract Term</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Craneveyor Corp</td>
<td>Bridge Crane Inspections</td>
<td>Open Competition</td>
<td>10/15/2017-10/23/2019</td>
<td>$80,000</td>
<td>2</td>
<td>Amount revised; previous amendment extended term</td>
<td>10/23/2021</td>
<td>$25,000</td>
<td>$105,000</td>
</tr>
<tr>
<td>Glenn A Rick Engineering &amp; Development</td>
<td>3D Scan of Tunnels - First Aqueduct</td>
<td>Special Circumstances - due to the timeline of a scheduled Tunnels shutdown, Vendor was identified as an experienced provider of 3D laser scanning services within confined spaces, such as pipelines and tunnels.</td>
<td>10/15/2020-1/31/2022</td>
<td>$49,750</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$49,750</td>
<td>$49,750</td>
</tr>
<tr>
<td>Hankins Construction Inc</td>
<td>Asphalt Sealcoat Application Services on Various Sites</td>
<td>Open Competition</td>
<td>6/7/2021-10/7/2021</td>
<td>$20,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Johnson Controls Fire Protection LP</td>
<td>Fire System Testing for Lake Hodges Facility</td>
<td>Open Competition</td>
<td>7/30/2020-11/30/2021</td>
<td>$11,284</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$11,284</td>
<td>$11,284</td>
</tr>
<tr>
<td>One Source Distributors LLC</td>
<td>Low Voltage Variable Frequency Drive Maintenance</td>
<td>Special Circumstances - Vendor is the exclusive distributor and the only factory authorized provider of parts and services for the low voltage VFD's used by the WA.</td>
<td>10/16/2017-10/16/2020</td>
<td>$83,874</td>
<td>1</td>
<td>Scope and amount revised; term extended</td>
<td>10/16/2023</td>
<td>$37,755</td>
<td>$121,629</td>
</tr>
<tr>
<td>Penhall Company</td>
<td>Asphalt and Concrete Cutting</td>
<td>Open Competition</td>
<td>2/11/2021-2/28/2022</td>
<td>$50,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Contractor Name</td>
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<td>---------------------------</td>
</tr>
<tr>
<td>Precision Air Inc</td>
<td>HVAC Maintenance and Repairs</td>
<td>Open Competition</td>
<td>10/25/2017-10/27/2019</td>
<td>$40,000</td>
<td>2</td>
<td>Amount revised; previous amendment added $50K in FY19 and extended term</td>
<td>10/27/2021</td>
<td>$30,000</td>
<td>$120,000</td>
</tr>
<tr>
<td>Prudential Overall Supply</td>
<td>Uniform/Mat Rental and Laundry Services</td>
<td>Open Competition</td>
<td>3/28/2021-3/31/2022</td>
<td>$86,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$86,000</td>
<td>$86,000</td>
</tr>
<tr>
<td>Regents of the University of California</td>
<td>Quagga Veliger Laboratory Services</td>
<td>Government Contract</td>
<td>2/17/2021-1/31/2022</td>
<td>$100,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Rural Metro Fire Dept Inc</td>
<td>Confined Space Rescue Services</td>
<td>Special Circumstances - Rush services need for March 2021 shutdown</td>
<td>3/4/2021-3/31/2021</td>
<td>$24,500</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$24,500</td>
<td>$24,500</td>
</tr>
<tr>
<td>Sealright Paving Inc</td>
<td>Asphalt Paving Services</td>
<td>Open Competition</td>
<td>5/18/2021-6/30/2021</td>
<td>$20,720</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$20,720</td>
<td>$20,720</td>
</tr>
<tr>
<td>Verizon Connect NWF Inc</td>
<td>Vehicle GPS Monitoring Service</td>
<td>COOP - Cooperative Agreement</td>
<td>7/1/2017-6/30/2019</td>
<td>$44,323</td>
<td>3</td>
<td>Amount revised and term extended; previous amendments added $16K in FY20 &amp; $11,081 in FY19</td>
<td>12/31/2024</td>
<td>$35,600</td>
<td>$107,004</td>
</tr>
</tbody>
</table>

Total for Operations & Maintenance $ 703,481
## PUBLIC AFFAIRS

**Cook + Schmid LLC**  
**Hispanic Outreach Pilot Campaign**  
Specialized & Professional Services: Vendor is a Hispanic and small business that has extensive and proprietary experience in managing multicultural digital outreach programs. Time was of the essence as grant fund used to fund pilot program would expire in 90 days.

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Cook + Schmid LLC</strong></td>
<td><strong>Hispanic Outreach Pilot Campaign</strong></td>
<td>Specialized &amp; Professional Services: Vendor is a Hispanic and small business that has extensive and proprietary experience in managing multicultural digital outreach programs. Time was of the essence as grant fund used to fund pilot program would expire in 90 days.</td>
<td>4/17/2020-12/31/2020</td>
<td>$25,000</td>
<td>2-3</td>
<td>Scope and amount revised, and term extended; previous amendment added $40K in FY20.</td>
<td>6/30/2021</td>
<td>$48,200</td>
<td>$113,200</td>
</tr>
</tbody>
</table>

**Entercom Communications**  
**Campaign to Promote Water Conservation**  
Exempt per Admin Code

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Description</th>
<th>Procurement Type</th>
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<th>Amend No(s.)</th>
<th>Contract/Amendment Information</th>
<th>Revised Contract End Date</th>
<th>Amount Above $10K Added FY2021</th>
<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entercom Communications</strong></td>
<td><strong>Campaign to Promote Water Conservation</strong></td>
<td>Exempt per Admin Code</td>
<td>9/25/2020-12/31/2021</td>
<td>$60,650</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$60,650</td>
<td>$60,650</td>
</tr>
</tbody>
</table>

**IVC Media LLC**  
**Promotional Video for a "Drought Safe San Diego"**  
Special Circumstances - Vendor has unique expertise in producing documentary-style videos, and they also have in-house translators to produce Spanish versions without additional vendors and expenses, as well as being able to produce the video within a short turnaround time.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>IVC Media LLC</strong></td>
<td><strong>Promotional Video for a &quot;Drought Safe San Diego&quot;</strong></td>
<td>Special Circumstances - Vendor has unique expertise in producing documentary-style videos, and they also have in-house translators to produce Spanish versions without additional vendors and expenses, as well as being able to produce the video within a short turnaround time.</td>
<td>6/30/2021-7/31/2021</td>
<td>$30,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$30,000</td>
<td>$30,000</td>
</tr>
</tbody>
</table>

**Mentus Inc**  
**Annual Report Microsite Development**

<table>
<thead>
<tr>
<th>Contractor Name</th>
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<th>Amend No(s.)</th>
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<th>Amount Above $10K Added FY2021</th>
<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mentus Inc</strong></td>
<td><strong>Annual Report Microsite Development</strong></td>
<td>Competitive</td>
<td>9/16/2019-9/30/2021</td>
<td>$34,940</td>
<td>1</td>
<td>Scope and amount revised</td>
<td>N/A</td>
<td>$17,750</td>
<td>$52,690</td>
</tr>
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</table>
## ATTACHMENT 1: CONTRACTS AND AMENDMENTS ISSUED (Above $10,000 not Board Approved)
### BETWEEN JULY 1, 2020 - JUNE 30, 2021

<table>
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<tr>
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<th>Cumulative Contract Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novus Origo</td>
<td>Education Workbook</td>
<td>COOP - Cooperative Agreement</td>
<td>2/8/2021-12/31/2021</td>
<td>$45,999</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$45,999</td>
<td>$45,999</td>
</tr>
<tr>
<td>Paula Roberts</td>
<td>Outreach &amp; Community Relations</td>
<td>Competitive</td>
<td>10/11/2018-6/30/2020</td>
<td>$50,000</td>
<td>1</td>
<td>Amount revised and term extended</td>
<td>2/28/2021</td>
<td>$15,000</td>
<td>$65,000</td>
</tr>
<tr>
<td>Quorum Analytics Inc</td>
<td>Quorum Software Subscription</td>
<td>Exempt per Admin Code</td>
<td>3/24/2021-3/18/2023</td>
<td>$40,320</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$40,320</td>
<td>$40,320</td>
</tr>
<tr>
<td>Siteimprove Inc</td>
<td>Website Analytics Services</td>
<td>Exempt per Admin Code</td>
<td>10/9/2019-10/15/2020</td>
<td>$13,500</td>
<td>1</td>
<td>Amount revised and term extended</td>
<td>10/15/2021</td>
<td>$13,500</td>
<td>$27,000</td>
</tr>
<tr>
<td>Southwest Strategies, LLC</td>
<td>BTYBW Regional Communications Program</td>
<td>Special Circumstances - Contract was extended two months to avoid interruption of services and allow for competitive bidding of contract once Board had approved budget.</td>
<td>4/5/2018-2/28/2019</td>
<td>$244,000</td>
<td>2</td>
<td>Amount revised and term extended; previous amendment adding $565K was Board approved</td>
<td>8/31/2021</td>
<td>$40,000</td>
<td>$849,000</td>
</tr>
</tbody>
</table>

**Total for Public Affairs** | | | | | | | | | **$ 311,419** |
## ATTACHMENT 1: CONTRACTS AND AMENDMENTS ISSUED (Above $10,000 not Board Approved)

### BETWEEN JULY 1, 2020 - JUNE 30, 2021

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</tr>
</thead>
<tbody>
<tr>
<td><strong>WATER RESOURCES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black &amp; Veatch Corporation</td>
<td>Regional Stormwater Capture Pre-Planning and Feasibility Study</td>
<td>Special Circumstances - Vendor is uniquely qualified to conduct this study and meet the aggressive schedule because of their extensive knowledge and familiarity with conducting similar studies in the region.</td>
<td>4/8/2021-6/30/2021</td>
<td>$75,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$75,000</td>
<td>$75,000</td>
</tr>
<tr>
<td>DCSE Inc</td>
<td>Data Archival &amp; Invoice System Maintenance</td>
<td>Special Circumstances - Vendor successfully implemented the DAIS application and has extensive knowledge of the WA’s invoicing process.</td>
<td>12/9/2020-6/30/2021</td>
<td>$60,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$60,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Davis Farr LLP</td>
<td>IRWM Local Project Sponsor Desk Audit Services</td>
<td>Competitive</td>
<td>1/10/2021-6/30/2021</td>
<td>$20,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Hazen and Sawyer PC</td>
<td>Climate Change Risk Assessment for Water Authority owned and operated infrastructure</td>
<td>Competitive</td>
<td>4/29/2021-9/30/2021</td>
<td>$49,009</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>$49,009</td>
<td>$49,009</td>
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</tbody>
</table>
### ATTACHMENT 1: CONTRACTS AND AMENDMENTS ISSUED (Above $10,000 not Board Approved)

#### BETWEEN JULY 1, 2020 - JUNE 30, 2021

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</tr>
</thead>
<tbody>
<tr>
<td>Jacobs Engineering Group Inc</td>
<td>Update Water Authority’s CWASim Planning Model and Short-term Delivery Forecast Model</td>
<td>Special Circumstances - Vendor built the current GoldSim model that is used by the WA so they have the specific knowledge and familiarity with the model, the WA system, and efficient method to conduct updates and analyses.</td>
<td>3/4/2021-6/30/2021</td>
<td>$29,960</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>N/A</td>
<td>$29,960</td>
<td>$29,960</td>
</tr>
<tr>
<td>Michael R Welch PhD PE</td>
<td>As-needed Regulatory and Policy Support</td>
<td>Special Circumstances - Vendor has specialized technical expertise and extensive experience involving complicated regulatory issues related to reservoir water quality, water treatment plant residual compliance, and recycled water and potable reuse permitting and has been involved with the WA on these issues.</td>
<td>7/21/2020-6/30/2023</td>
<td>$25,000</td>
<td>N/A</td>
<td>New Contract</td>
<td>N/A</td>
<td>N/A</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
</tbody>
</table>

**Total for Water Resources**  

$$258,969$$

**ACCUMULATED TOTAL**  

$$3,623,844$$
## ATTACHMENT 2: PURCHASE ORDERS ISSUED (Above $10,000 not Board Approved)
### BETWEEN JULY 1, 2020 - JUNE 30, 2021

<table>
<thead>
<tr>
<th>PO No.</th>
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<th>PO Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>39451</td>
<td>Arthur J Gallagher &amp; Co</td>
<td>Cyber insurance renewal</td>
<td>Competitive</td>
<td>12/1/2020</td>
<td>$17,483</td>
</tr>
<tr>
<td>38385</td>
<td>Arthur J Gallagher &amp; Co</td>
<td>Pollution insurance</td>
<td>Competitive</td>
<td>7/28/2020</td>
<td>$27,315</td>
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<tr>
<td></td>
<td></td>
<td><strong>Subtotal for Arthur J Gallagher &amp; Co</strong></td>
<td></td>
<td></td>
<td>$44,798</td>
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<tr>
<td>39404</td>
<td>CDW Government Inc</td>
<td>Proofpoint Essentials Pro</td>
<td>Cooperative</td>
<td>7/16/2020</td>
<td>$11,869</td>
</tr>
<tr>
<td>39945</td>
<td>CDW Government Inc</td>
<td>Microsoft Surface Pro 7 Tablets Core i7 1065G7</td>
<td>Cooperative</td>
<td>12/22/2020</td>
<td>$11,627</td>
</tr>
<tr>
<td>39404</td>
<td>CDW Government Inc</td>
<td>Proofpoint Essentials Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Subtotal for CDW Government Inc</strong></td>
<td></td>
<td></td>
<td>$36,955</td>
</tr>
<tr>
<td>40496</td>
<td>Carahsoft Technology Corp</td>
<td>ServiceNow HelpDesk Annual Subscription Renewal</td>
<td>Cooperative</td>
<td>6/4/2021</td>
<td>$43,987</td>
</tr>
<tr>
<td>40329</td>
<td>Carahsoft Technology Corp</td>
<td>DocuSign Enterprise Pro for Gov-Seats;DocuSign, Inc. APT-0391</td>
<td>Cooperative</td>
<td>4/21/2021</td>
<td>$13,513</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start date: 05/14/2021 - End Date: 05/13/2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40224</td>
<td>Carahsoft Technology Corp</td>
<td>Year 3: ZIA Business Bundle for web security Zscaler, Inc</td>
<td>Cooperative</td>
<td>3/23/2021</td>
<td>$14,393</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start Date: 05/26/2023</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>End Date: 05/25/2024</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Part# ZIA-BUS-BUNDLE</td>
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</tr>
<tr>
<td></td>
<td></td>
<td><strong>Subtotal for Carahsoft Technology Corp</strong></td>
<td></td>
<td></td>
<td>$71,893</td>
</tr>
<tr>
<td>40097</td>
<td>Dell Marketing LP</td>
<td>15 Dell Latitude 5520 Laptops - 16GB memory - 512GB SSD hard drive</td>
<td>Cooperative</td>
<td>2/10/2021</td>
<td>$25,675</td>
</tr>
<tr>
<td>40041</td>
<td>Dell Marketing LP</td>
<td>15 Dell Latitude 5520 Laptops - 16GB memory - 512GB SSD hard drive</td>
<td>Cooperative</td>
<td>1/26/2021</td>
<td>$25,624</td>
</tr>
<tr>
<td>39569</td>
<td>Dell Marketing LP</td>
<td>Support Renewal for Dell MXL10 switch (DSHMW12) Ends 08/06/2021</td>
<td>Cooperative</td>
<td>9/1/2020</td>
<td>$17,757</td>
</tr>
</tbody>
</table>
### ATTACHMENT 2: PURCHASE ORDERS ISSUED (Above $10,000 not Board Approved)
**BETWEEN JULY 1, 2020 - JUNE 30, 2021**

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</tr>
</thead>
<tbody>
<tr>
<td>39676</td>
<td>Dell Marketing LP</td>
<td>15 Dell Latitude 5511 Laptops - 16GB memory - 512GB SSD hard drive</td>
<td>Cooperative</td>
<td>9/30/2020</td>
<td>$ 25,626</td>
</tr>
<tr>
<td>40072</td>
<td>Dell Marketing LP</td>
<td>Secureworks CS SDCWA Secureworks iSensor Subscription 500 Mb 8-Port 1G Copper</td>
<td>Cooperative</td>
<td>2/3/2021</td>
<td>$ 82,610</td>
</tr>
<tr>
<td>39560</td>
<td>Dell Marketing LP</td>
<td>Dell Storage Unit Onsite Support Renewal for Kearny Mesa</td>
<td>Cooperative</td>
<td>8/28/2020</td>
<td>$ 18,951</td>
</tr>
<tr>
<td>39559</td>
<td>Dell Marketing LP</td>
<td>Dell Storage Unit Onsite Support Renewal for Escondido</td>
<td>Cooperative</td>
<td>8/27/2020</td>
<td>$ 18,951</td>
</tr>
<tr>
<td>39764</td>
<td>Dell Marketing LP</td>
<td>15 Dell OptiPlex 7080 Desktops - i9 CPU, 256 SSD HardDrive - 32 GB memory</td>
<td>Cooperative</td>
<td>10/29/2020</td>
<td>$ 19,880</td>
</tr>
<tr>
<td>40245</td>
<td>Dell Marketing LP</td>
<td>15 OptiPlex 7080 Desktops with i9 CPU - 512GB SSD - 32GB memory</td>
<td>Cooperative</td>
<td>3/30/2021</td>
<td>$ 18,991</td>
</tr>
<tr>
<td>40348</td>
<td>Dell Marketing LP</td>
<td>15 Latitude 5520 Laptops - 16GB mem - 512GB SSD</td>
<td>Cooperative</td>
<td>4/27/2021</td>
<td>$ 26,537</td>
</tr>
<tr>
<td>40409</td>
<td>Dell Marketing LP</td>
<td>Dell Data Protection Suite DDVE Bundle for Commercial Software</td>
<td>Cooperative</td>
<td>5/11/2021</td>
<td>$ 43,918</td>
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<tr>
<td></td>
<td><strong>Subtotal for Dell Marketing LP</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$ 324,520</strong></td>
</tr>
<tr>
<td>39557</td>
<td>ESRI - Environmental Systems Research Institute</td>
<td>ArcGIS Desktop Advanced Concurrent Use Primary Maintenance</td>
<td>Sole Source: Software is available for purchase from other vendors but maintenance is available only through ESRI</td>
<td>7/1/2020</td>
<td>$ 15,100</td>
</tr>
<tr>
<td>39334</td>
<td>Hyland Software Inc</td>
<td>OnBase Software Maintenence 9-1-20 through 8-31-21</td>
<td>Cooperative</td>
<td>7/1/2020</td>
<td>$ 35,869</td>
</tr>
<tr>
<td>39357</td>
<td>Mythics Inc</td>
<td>Annual support renewal for two SUN servers; ends 7/31/2021</td>
<td>Competitive</td>
<td>7/7/2020</td>
<td>$ 12,919</td>
</tr>
<tr>
<td>39345</td>
<td>Old American Inc</td>
<td>IBM Maximo Asset Management Authorized User Annual SW Subscription &amp; Support Renewal</td>
<td>Competitive</td>
<td>7/2/2020</td>
<td>$ 74,902</td>
</tr>
<tr>
<td>39374</td>
<td>Presidio Networked Solutions Group LLC</td>
<td>Support renewal for Cisco Network Switches: FCW2014H0A0, FCW2014H0AA, FXS2202Q348, FOX1512GU05 and FOX1512GU4F</td>
<td>Cooperative</td>
<td>7/8/2020</td>
<td>$ 46,959</td>
</tr>
<tr>
<td>39730</td>
<td>SHI International Corp.</td>
<td>Adobe DC Pro and Creative Cloud Subscriptions</td>
<td>Cooperative</td>
<td>10/21/2020</td>
<td>$ 19,316</td>
</tr>
<tr>
<td>39620</td>
<td>Software One Inc</td>
<td>Microsoft Azure Monthly Overages from Microsoft EA License</td>
<td>Exempt Admin Code</td>
<td>9/14/2020</td>
<td>$ 53,000</td>
</tr>
</tbody>
</table>
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</thead>
<tbody>
<tr>
<td>40408</td>
<td>Software One Inc</td>
<td>Microsoft Project Plan3 GCC Shared All Lng Subs VL MVL Per User</td>
<td>Cooperative</td>
<td>5/11/2021</td>
<td>$11,783</td>
</tr>
<tr>
<td>40486</td>
<td>Software One Inc</td>
<td>Microsoft Enterprise/Office365 Annual Renewal</td>
<td>Cooperative</td>
<td>6/2/2021</td>
<td>$149,524</td>
</tr>
<tr>
<td></td>
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<td></td>
<td><strong>$214,307</strong></td>
</tr>
<tr>
<td>39592</td>
<td>Zenith Insurance Company</td>
<td>Workers' Compensation end of year reconciliation</td>
<td>Competitive</td>
<td>9/8/2020</td>
<td>$18,210</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Subtotal for Software One Inc</strong></td>
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<td></td>
<td><strong>$214,307</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total for Administrative Services</strong></td>
<td></td>
<td></td>
<td><strong>$915,748</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total for Engineering</strong></td>
<td></td>
<td></td>
<td><strong>$103,531</strong></td>
</tr>
<tr>
<td>39999</td>
<td>DLT Solutions LLC</td>
<td>AutoCAD Subscription Renewal</td>
<td>Competitive</td>
<td>1/11/2021</td>
<td>$25,694</td>
</tr>
<tr>
<td>39898</td>
<td>Flo Systems</td>
<td>Impeller Assy, 14.20&quot; Diameter</td>
<td>Special Circumstances - Flo Systems is the local Pentair distributor; Pentair impellers need to be compatible with existing Valley Center Pump Station pumps</td>
<td>12/10/2020</td>
<td>$24,575</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total for Engineering</strong></td>
<td></td>
<td></td>
<td><strong>$103,531</strong></td>
</tr>
<tr>
<td>40344</td>
<td>United Rentals Inc</td>
<td>Confined space entry equipment and manhole protector</td>
<td>Competitive</td>
<td>4/26/2021</td>
<td>$18,517</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total for Human Resources</strong></td>
<td></td>
<td></td>
<td><strong>$18,517</strong></td>
</tr>
</tbody>
</table>
### OPERATIONS & MAINTENANCE

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>39409</td>
<td>Accurate Measurement Systems Inc</td>
<td>SMAR Gauge Pressure HART Transmitter (Qty 10)</td>
<td>Special Circumstances - AMS is the only distributor of SMAR differential pressure transmitters</td>
<td>7/20/2020</td>
<td>$46,475</td>
</tr>
<tr>
<td>40274</td>
<td>B&amp;K Valves &amp; Equipment Inc</td>
<td>Replacement of 4 84-inch Adams Valve seats for Rancho Peñasquitos Pressure and Hydroelectric Facility</td>
<td>Special Circumstances - B&amp;K is the exclusive authorized distributor for Adams Valves for CA and NV</td>
<td>4/7/2021</td>
<td>$32,498</td>
</tr>
<tr>
<td>40391</td>
<td>Baldwin Services Group Limited Inc</td>
<td>1440SVS Precision Variable Speed Gap Bed Engine Lathe EVS inverter drive with D1-4 spindle 5 HP motor</td>
<td>Competitive</td>
<td>5/5/2021</td>
<td>$13,792</td>
</tr>
<tr>
<td>40381</td>
<td>Baldwin Services Group Limited Inc</td>
<td>Acra LCTM-1 Vertical Variable Speed Milling Machine</td>
<td>Competitive</td>
<td>5/4/2021</td>
<td>$12,063</td>
</tr>
<tr>
<td>39753</td>
<td>Beamex Inc</td>
<td>MC6 ADVANCED FIELD CALIBRATOR/COMMUNICATOR (Qty 2)</td>
<td>Sole Source - Beamex hardware/software are proprietary and Beamex is the sole distributor of their products</td>
<td>10/27/2020</td>
<td>$35,892</td>
</tr>
<tr>
<td>39458</td>
<td>Bedco</td>
<td>Provide and Install one (1) utility bed for Fleet# 263 Ford F-350</td>
<td>Competitive</td>
<td>7/30/2020</td>
<td>$24,783</td>
</tr>
<tr>
<td>40236</td>
<td>CBIONE</td>
<td>Test, inspection and full reconditioning/rebuilding of two HD4, 17.5kV medium voltage SF6 mass circuit breakers at Lake Hodges Hydroelectric Facility</td>
<td>Special Circumstances - Backordered parts required vendor to take months to repair the first faulty breaker; a second breaker failed a few months later and also needed repair</td>
<td>3/29/2021</td>
<td>$19,845</td>
</tr>
<tr>
<td>40349</td>
<td>Clark &amp; Sons Tool Supply LLC</td>
<td>Part #EAC334B Polartek Dual AC Machine; Part #EAC334CVR AC Machine Cover</td>
<td>Competitive</td>
<td>4/27/2021</td>
<td>$14,053</td>
</tr>
<tr>
<td>39466</td>
<td>Compressed Air Systems Engineering</td>
<td>Rebuild Sullivan Air Compressor for Lake Hodges Hydroelectric Facility</td>
<td>Exempt Admin Code</td>
<td>7/30/2020</td>
<td>$12,872</td>
</tr>
<tr>
<td>40089</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of UPS units</td>
<td>Competitive</td>
<td>2/9/2021</td>
<td>$21,141</td>
</tr>
<tr>
<td>40365</td>
<td>Corrpro Companies Inc</td>
<td>60x 40D3 high potential magnesium anodes</td>
<td>Competitive</td>
<td>4/29/2021</td>
<td>$15,889</td>
</tr>
<tr>
<td>40246</td>
<td>Deep Trekker Inc</td>
<td>One (1) REVOLUTION A7510 Remote Operating Vehicle</td>
<td>Competitive</td>
<td>3/30/2021</td>
<td>$33,758</td>
</tr>
</tbody>
</table>
### ATTACHMENT 2: PURCHASE ORDERS ISSUED (Above $10,000 not Board Approved)

**BETWEEN JULY 1, 2020 - JUNE 30, 2021**

<table>
<thead>
<tr>
<th>PO No.</th>
<th>Vendor</th>
<th>Description</th>
<th>Procurement Type</th>
<th>Issue Date</th>
<th>PO Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>39794</td>
<td>Control or Security System Service Provider¹</td>
<td>Annual Software and Hardware Support for the Aqueduct Control System</td>
<td>Cooperative</td>
<td>11/9/2020</td>
<td>$ 19,678</td>
</tr>
<tr>
<td>39795</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of security system equipment</td>
<td>Cooperative</td>
<td>11/9/2020</td>
<td>$ 19,680</td>
</tr>
<tr>
<td>40027</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of security system equipment</td>
<td>Cooperative</td>
<td>1/21/2021</td>
<td>$ 18,382</td>
</tr>
<tr>
<td>40026</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of security system equipment</td>
<td>Cooperative</td>
<td>1/21/2021</td>
<td>$ 18,382</td>
</tr>
<tr>
<td>39554</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of card access system equipment</td>
<td>Cooperative</td>
<td>8/26/2020</td>
<td>$ 11,803</td>
</tr>
<tr>
<td>40025</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of security system equipment</td>
<td>Cooperative</td>
<td>1/21/2021</td>
<td>$ 19,016</td>
</tr>
<tr>
<td>40023</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of security system equipment</td>
<td>Cooperative</td>
<td>1/21/2021</td>
<td>$ 19,016</td>
</tr>
<tr>
<td>39793</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of security system equipment</td>
<td>Cooperative</td>
<td>11/9/2020</td>
<td>$ 19,016</td>
</tr>
<tr>
<td>39875</td>
<td>Control or Security System Service Provider¹</td>
<td>Annual Software and Hardware Support for the Aqueduct Control System</td>
<td>Cooperative</td>
<td>12/7/2020</td>
<td>$ 25,366</td>
</tr>
<tr>
<td>39953</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of security system equipment</td>
<td>Cooperative</td>
<td>12/23/2020</td>
<td>$ 19,016</td>
</tr>
</tbody>
</table>

**Subtotal**

<table>
<thead>
<tr>
<th>PO No.</th>
<th>Vendor</th>
<th>Description</th>
<th>Procurement Type</th>
<th>Issue Date</th>
<th>PO Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>39652</td>
<td>Control or Security System Service Provider¹</td>
<td>Annual Software and Hardware Support for the Aqueduct Control System</td>
<td>Exempt Admin Code</td>
<td>9/24/2020</td>
<td>$ 40,945</td>
</tr>
<tr>
<td>39411</td>
<td>Control or Security System Service Provider¹</td>
<td>Card access upgrade hardware</td>
<td>Special Circumstances - Vendor is the authorized supplier of the hardware/software for the Water Authority's existing access card system</td>
<td>7/20/2020</td>
<td>$ 44,498</td>
</tr>
<tr>
<td>40377</td>
<td>Control or Security System Service Provider¹</td>
<td>Intercom System</td>
<td>Competitive</td>
<td>5/3/2021</td>
<td>$ 23,939</td>
</tr>
<tr>
<td>40020</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of PLC equipment</td>
<td>Special Circumstances - Vendor is the sole distributor of control system products</td>
<td>1/20/2021</td>
<td>$ 37,909</td>
</tr>
</tbody>
</table>
## ATTACHMENT 2: PURCHASE ORDERS ISSUED (Above $10,000 not Board Approved)
### BETWEEN JULY 1, 2020 - JUNE 30, 2021

<table>
<thead>
<tr>
<th>PO No.</th>
<th>Vendor</th>
<th>Description</th>
<th>Procurement Type</th>
<th>Issue Date</th>
<th>PO Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>39818</td>
<td>Control or Security System Service Provider¹</td>
<td>Annual Software and Hardware Support for the Aqueduct Control System</td>
<td>Special Circumstances - Tech support can only be provided by the manufacturer</td>
<td>11/19/2020</td>
<td>$17,777</td>
</tr>
<tr>
<td>39751</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of PLC equipment</td>
<td>Special Circumstances - Vendor is the sole distributor of control system products</td>
<td>10/26/2020</td>
<td>$37,899</td>
</tr>
<tr>
<td>39749</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of PLC equipment</td>
<td>Special Circumstances - Vendor is the sole distributor of control system products</td>
<td>10/26/2020</td>
<td>$13,776</td>
</tr>
<tr>
<td>39543</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of operator interface terminals</td>
<td>Special Circumstances - Vendor is the sole distributor of control system products</td>
<td>8/25/2020</td>
<td>$14,460</td>
</tr>
<tr>
<td>39750</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of PLC equipment</td>
<td>Special Circumstances - Vendor is the sole distributor of control system products</td>
<td>10/26/2020</td>
<td>$90,012</td>
</tr>
<tr>
<td>40229</td>
<td>Control or Security System Service Provider¹</td>
<td>Replacement of PLC equipment</td>
<td>Special Circumstances - Vendor is the sole distributor of control system products</td>
<td>3/25/2021</td>
<td>$20,100</td>
</tr>
</tbody>
</table>

*Subtotal*                                                                                                     |                                                                                     |                       |

|                                                        |                                                                                     | $231,933             |
## ATTACHMENT 2: PURCHASE ORDERS ISSUED (Above $10,000 not Board Approved)
### BETWEEN JULY 1, 2020 - JUNE 30, 2021

<table>
<thead>
<tr>
<th>PO No.</th>
<th>Vendor</th>
<th>Description</th>
<th>Procurement Type</th>
<th>Issue Date</th>
<th>PO Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>40307</td>
<td>PdMA Corporation</td>
<td>One PdMA MCEmax M5222 motor tester</td>
<td>Special Circumstances - M5222 model is the only advanced portable motor tester capable of performing required bench accurate motor tests on both energized and de-energized motors; PdMA is the manufacturer and only sells directly.</td>
<td>4/19/2021</td>
<td>$ 66,880</td>
</tr>
<tr>
<td>39635</td>
<td>Control or Security System</td>
<td>Annual Software and Hardware Support for the Aqueduct Control System</td>
<td>Cooperative</td>
<td>9/21/2020</td>
<td>$ 31,548</td>
</tr>
<tr>
<td>39916</td>
<td>Control or Security System</td>
<td>Replacement of communication hardware</td>
<td>Cooperative</td>
<td>12/16/2020</td>
<td>$ 99,846</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Subtotal</td>
<td>$ 131,394</td>
<td></td>
</tr>
<tr>
<td>40192</td>
<td>Control or Security System</td>
<td>Annual Software and Hardware Support for the Aqueduct Control System</td>
<td>Exempt Admin Code</td>
<td>3/15/2021</td>
<td>$ 23,509</td>
</tr>
<tr>
<td>40323</td>
<td>Control or Security System</td>
<td>Replacement of UPS units</td>
<td>Competitive</td>
<td>4/21/2021</td>
<td>$ 30,138</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total for Operations &amp; Maintenance</td>
<td>$ 1,065,652</td>
<td></td>
</tr>
</tbody>
</table>

### PUBLIC AFFAIRS

<table>
<thead>
<tr>
<th>PO No.</th>
<th>Vendor</th>
<th>Description</th>
<th>Procurement Type</th>
<th>Issue Date</th>
<th>PO Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>40627</td>
<td>Citcaster Co</td>
<td>Advertising for Drought safe campaign</td>
<td>Exempt Admin Code</td>
<td>6/30/2021</td>
<td>$ 10,000</td>
</tr>
<tr>
<td>40230</td>
<td>Digilant Inc</td>
<td>Advertising campaign for Water News Network</td>
<td>Exempt Admin Code</td>
<td>3/25/2021</td>
<td>$ 19,750</td>
</tr>
<tr>
<td>39896</td>
<td>Digilant Inc</td>
<td>Advertising campaign for water conservation</td>
<td>Exempt Admin Code</td>
<td>12/10/2020</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>39817</td>
<td>Live Spark Online Marketing Inc</td>
<td>Advertising for social media influencer campaign</td>
<td>Exempt Admin Code</td>
<td>11/19/2020</td>
<td>$ 15,887</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total for Public Affairs</td>
<td>$ 95,637</td>
<td></td>
</tr>
</tbody>
</table>

### ACCUMULATED TOTAL

<table>
<thead>
<tr>
<th>PO No.</th>
<th>Vendor</th>
<th>Description</th>
<th>Procurement Type</th>
<th>Issue Date</th>
<th>PO Amount</th>
</tr>
</thead>
</table>

| ACCUMULATED TOTAL | $ 2,199,085 |

Notes:
1: Vendor name not provided due to control and/or security concerns.

General Counsel expenditures are reported to the Board in the monthly General Counsel's Report.
September 15, 2021

Attention: Administrative and Finance Committee

Controller’s Report on Monthly Financial Activity. (Information)

Purpose
The purpose of the Controller’s Report is to provide summarized financial information on a monthly basis to the Board of Directors.

Financial Information
Attached for review by the Administrative and Finance Committee and the Board of Directors are the following financial documents comprising the Controller’s Report:

1. Water Sales Volumes, in acre-feet
2. YOY Water Sales Comparison FY21 and FY20
3. Water Sales Revenues, in millions
4. Water Purchases and Treatment Costs, in millions
5. Budget Status Report
6. Schedule of Cash and Investments

The Water Authority is in the process of undergoing the year-end audit and preparing the audited Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2021. This report contains preliminary/unaudited financial information for the twenty-four-month period of July 1, 2019 through June 30, 2021.

Fiscal Years 2020 & 2021 Results
A summary of the Fiscal Years 2020 and 2021 Budget Status Report (in millions) are as follows:

<table>
<thead>
<tr>
<th>FY 2020 &amp; 2021</th>
<th>Adopted Budget</th>
<th>Amended Budget</th>
<th>Actual</th>
<th>$ Variance</th>
<th>% Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Water Sales</td>
<td>$1,306.9</td>
<td>$1,306.9</td>
<td>$1,182.2</td>
<td>$ (124.7)</td>
</tr>
<tr>
<td></td>
<td>Water Purchases &amp; Treatment</td>
<td>1,078.5</td>
<td>1,075.5</td>
<td>964.1</td>
<td>111.4</td>
</tr>
<tr>
<td></td>
<td>Net Water Sales Revenue</td>
<td>228.4</td>
<td>231.4</td>
<td>218.1</td>
<td>(13.3)</td>
</tr>
<tr>
<td></td>
<td>Revenues &amp; Other Income</td>
<td>237.1</td>
<td>237.1</td>
<td>282.5</td>
<td>* 45.4</td>
</tr>
<tr>
<td></td>
<td>Total Revenues</td>
<td>465.5</td>
<td>468.5</td>
<td>500.6</td>
<td>32.1</td>
</tr>
<tr>
<td></td>
<td>Total Expenses</td>
<td>446.9</td>
<td>449.9</td>
<td>453.9</td>
<td>* (4.0)</td>
</tr>
<tr>
<td></td>
<td>Net Revenues Before CIP</td>
<td>18.6</td>
<td>18.6</td>
<td>46.7</td>
<td>28.1</td>
</tr>
<tr>
<td></td>
<td>CIP Expenses</td>
<td>162.2</td>
<td>162.2</td>
<td>108.6</td>
<td>53.6</td>
</tr>
<tr>
<td></td>
<td>Net Fund Withdraws</td>
<td>$ (143.6)</td>
<td>$ (143.6)</td>
<td>$ (61.9)</td>
<td>$ 81.7</td>
</tr>
</tbody>
</table>

* Other Income and Other Expenses include the $44.4 million MWD settlement monies.

The Fiscal Years 2020 and 2021 amended budget provided for a withdrawal from fund balance of $143.6 million, but the actual amount required from fund balance was a withdrawal of $61.9 million. Therefore, the Water Authority is showing a preliminary favorable variance to budget of $81.7 million because total revenues were higher than budget by $32.1 million and total
expenses, including CIP, were lower than budget by $49.6 million. Water sales and water purchases and treatment costs are both below budget by 10 percent, as can be seen in the summary table. Actual net water sales revenue was $218.1 million or 6 percent lower than the twenty-four-month budget. Actual other revenues and other expenses were $282.5 million and $453.9 million, respectively, which included the $44.4 million judgment payment received from MWD and then distributed to the 24 member agencies comprising the Water Authority. CIP expenses were $53.6 million below budget, contributing to a significantly lower draw from fund balance than projected through June. Additional details on these variances follow.

**Net Water Sales Revenue**

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, storage, infrastructure access charge, and supply reliability. Cost of water includes payments to the following water suppliers: Metropolitan Water District (MWD), Imperial Irrigation District (IID), and Poseidon Resources (Channelside) LP.

Net Water Sales Revenue for the twenty-four-month period ended June 30, 2021 was $218.1 million, or 6 percent lower than the budgeted amount of $231.5 million. Actual Water Purchase and Treatment Costs were lower than budgeted by 10 percent due to lower than projected water sales of 10 percent. Detailed information relating to Net Water Sales Revenue is described below and shown on Attachments 1, 2, 3, and 4.

Total acre-feet (AF) of water sold was budgeted at 831,989 AF for the twenty-four-month period ended June 30, 2021. Actual water sales volumes were 738,174 AF or 11 percent less than budgeted due to lower demand (Attachment 1). The fiscal year 2021 actual water sales volumes through June 2021 were 384,167 AF, or 8.5 percent higher compared to the prior fiscal year’s actual water sales volumes of 354,007 AF through June 2020 (Attachment 2). Total Water Sales Revenues were $1,182.2 million or 10 percent lower than the budget of $1,306.9 million (Attachment 3). Reduced water sales continued through this reporting period and cumulatively are lower due to (1) increased member agency use of local water supplies from surface water as a result of multiple wet years than anticipated, (2) the demand dampening effects of significant local rainstorms experienced over the November, December, and April months of Fiscal Year 2020 and (3) pandemic related economic downturn adversely impacting water demands.

Total Water Purchases and Treatment costs were budgeted at $1,075.5 million. Actual costs were $964.1 million or 10 percent lower than budgeted (Attachment 4). This cost category included $253.0 million for 377,502 AF of water purchased from IID, $264.7 million for MWD’s conveyance charges related to IID, Coachella Canal and All-American Canal water, and $245.0 million of water purchased from Poseidon Resources (Channelside) LP.

**Revenues and Other Income**

As shown in Attachment 5, total Revenues and Other Income were budgeted at $237.1 million for the twenty-four-month period ended June 30, 2021. Actual revenues were $282.5 million or $45.4 million higher than budget.
Actual revenues materially higher than the twenty-four-month budget include the following:

- **Other Income**: $48.3 million higher than budgeted due to the judgment payment of $44.4 million received from MWD, contracted shortfall payment revenues received from Poseidon for the months of May through July 2020, and due to other miscellaneous revenue reimbursements
- **Capacity Charges**: $3.5 million higher than anticipated due to an increase in the number of building permits issued for water services throughout the county
- **Property Taxes**: $3.5 million higher than anticipated due to increased property values
- **Contributions in Aid of CIP**: $2.3 million higher than budgeted due to a capital grant received relating to the DWR Prop 50 Desal Relining Project K0304

Actual revenues materially lower than the twenty-four-month budget include the following:

- **Grant Reimbursements**: $10.8 million lower than budgeted due to an 18-month extension granted by DWR for the IRWM projects due to pandemic related delays along with permitting and environmental delays affecting construction, and, to a lesser extent, timing of reimbursements from the state of California’s Department of Water Resources
- **Hydroelectric Revenue**: $0.9 million lower than budgeted as a result of reduced water demands and an unplanned 3-month outage on one of two generating units at the Lake Hodges Hydroelectric facility in Fiscal Year 2020

**Expenses**

As shown in Attachment 5, total Expenses were budgeted at $449.9 million for the twenty-four-month period ended June 30, 2021. Actual expenses were $453.9 million or $4.0 million higher than budget.

Actual expenses materially higher than the twenty-four-month budget include the following:

- **Other Expenses**: $46.9 million higher than budgeted primarily due to the judgment payment of $44.4 million received from MWD that was rebated to the 24 member agencies; engineering and construction project costs related to the MWD Skinner bypass line completed in Fiscal Year 2021; increased compensated absences accruals (vacation and sick leaves) for employee leaves not yet taken; and lastly, costs related to developer deposits and grants program administration costs that were already reimbursed. (Generally Accepted Accounting Principles require that revenues and expenses be shown gross and not net, and so some of the Other Income reported above directly offsets Other Expenses)
- **Operating Departments**: $0.5 million higher than budgeted. Operating Department budgets include contributions for pension and OPEB benefits, but these expenses can vary significantly once actuarial reports are received (based on updated assumptions and experience studies), and so there was an additional $4.1 million and $2.5 million charge related to pensions in Fiscal Years 2020 and 2021, respectively, that will be paid through increased contributions in future years.

Actual expenses materially lower than the twenty-four-month budget include the following:

- **Debt Service**: $30.6 million lower than budget due to commercial paper program savings as a result of lower interest rates, and cash flow savings from bond refunding transactions
• **Grant Expenses**: $9.8 million lower than budgeted similar to the reduction in grant revenues because of the DWR 18-month project extension along with construction and implementation delays for the IRWM projects.

• **Equipment Replacement**: $2.9 million lower than budgeted due to the deferral of purchases

**CIP Expenses**
Attachment 5 shows CIP Expenses were budgeted at $162.2 million for the twenty-four-month period ended June 30, 2021. Actual expenses were $108.6 million or $53.6 million lower than budget due to the deferral of projects.

**Cash and Investments**
As of June 30, 2021, the Water Authority’s cash and investments balance was $262.2 million, approximately 91 percent unrestricted funds with the remaining 9 percent of funds restricted for specific purposes (Attachment 6). The Water Authority Treasurer pools the cash of the Pay-As-You-Go Fund with total unrestricted funds to maximize investment returns. The Rate Stabilization Fund (RSF) cash and investments balance was $104.2 million, representing approximately 140 percent of the targeted value of $74.3 million and 99 percent of the maximum balance of $105.2 million. In June 2018, the Water Authority Board approved a multi-year refinement to its RSF methodology. FY 2021 reflects the final adjustment to this methodology. The CY 2021 Rate Study forecasted future withdrawals to provide rate smoothing and align balances within the revised target levels.

Prepared by:  Jocelyn Matsuo, Senior Accountant  
Reviewed by:  Geena Xiaqing Balistrieri, CPA, Accounting Supervisor  
Approved by:  Christopher Woidzik, CPA, Controller

Attachments:
Attachment 1 – Water Sales Volumes  
Attachment 2 – YOY Water Sales Comparison FY21 and FY20  
Attachment 3 – Water Sales Revenues  
Attachment 4 – Water Purchases and Treatment Costs  
Attachment 5 – Budget Status Report  
Attachment 6 – Schedule of Cash and Investments
*Budgeted amounts are based on the Adopted Multi-Year Budget for Fiscal Years 2020 and 2021.

Fiscal Year 2020 Cumulative Water Sales (AF)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Actual</td>
<td>35,833</td>
<td>41,541</td>
<td>38,774</td>
<td>39,000</td>
<td>29,132</td>
<td>17,061</td>
<td>20,999</td>
<td>22,838</td>
<td>20,834</td>
<td>20,265</td>
<td>32,015</td>
<td>35,715</td>
</tr>
<tr>
<td>Cumulative Actual (a)</td>
<td>35,833</td>
<td>77,374</td>
<td>116,148</td>
<td>155,148</td>
<td>184,280</td>
<td>201,341</td>
<td>222,340</td>
<td>245,178</td>
<td>266,012</td>
<td>286,277</td>
<td>318,292</td>
<td>354,007</td>
</tr>
<tr>
<td>Monthly Budget</td>
<td>47,103</td>
<td>48,614</td>
<td>42,568</td>
<td>38,728</td>
<td>36,236</td>
<td>30,476</td>
<td>17,689</td>
<td>19,119</td>
<td>20,344</td>
<td>34,602</td>
<td>34,602</td>
<td>38,443</td>
</tr>
<tr>
<td>Cumulative Budget (b)</td>
<td>47,103</td>
<td>95,717</td>
<td>143,391</td>
<td>183,548</td>
<td>221,122</td>
<td>252,723</td>
<td>271,065</td>
<td>290,721</td>
<td>313,753</td>
<td>347,865</td>
<td>383,744</td>
<td>423,465</td>
</tr>
<tr>
<td>AF Difference (c) (a-b)</td>
<td>(11,270)</td>
<td>(18,343)</td>
<td>(22,137)</td>
<td>(21,865)</td>
<td>(28,969)</td>
<td>(42,384)</td>
<td>(39,074)</td>
<td>(35,355)</td>
<td>(34,865)</td>
<td>(49,202)</td>
<td>(51,789)</td>
<td>(54,517)</td>
</tr>
<tr>
<td>% Difference (c/b)</td>
<td>-24%</td>
<td>-19%</td>
<td>-16%</td>
<td>-12%</td>
<td>-14%</td>
<td>-17%</td>
<td>-15%</td>
<td>-13%</td>
<td>-12%</td>
<td>-15%</td>
<td>-14%</td>
<td>-13%</td>
</tr>
</tbody>
</table>

Fiscal Year 2021 Cumulative Water Sales (AF)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Monthly Actual</td>
<td>33,361</td>
<td>40,274</td>
<td>41,381</td>
<td>38,700</td>
<td>29,240</td>
<td>32,205</td>
<td>23,341</td>
<td>20,823</td>
<td>21,396</td>
<td>33,032</td>
<td>35,332</td>
<td>35,082</td>
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<tr>
<td>Cumulative Actual (a)</td>
<td>33,361</td>
<td>73,635</td>
<td>115,016</td>
<td>153,716</td>
<td>182,956</td>
<td>215,161</td>
<td>238,502</td>
<td>259,325</td>
<td>280,721</td>
<td>313,753</td>
<td>349,085</td>
<td>384,167</td>
</tr>
<tr>
<td>Monthly Budget</td>
<td>48,841</td>
<td>50,409</td>
<td>44,141</td>
<td>40,157</td>
<td>37,574</td>
<td>31,601</td>
<td>18,342</td>
<td>19,826</td>
<td>21,095</td>
<td>35,879</td>
<td>35,879</td>
<td>39,721</td>
</tr>
<tr>
<td>Cumulative Budget (b)</td>
<td>48,841</td>
<td>99,250</td>
<td>143,391</td>
<td>183,548</td>
<td>221,122</td>
<td>252,723</td>
<td>271,065</td>
<td>290,721</td>
<td>313,753</td>
<td>347,865</td>
<td>383,744</td>
<td>423,465</td>
</tr>
<tr>
<td>AF Difference (c) (a-b)</td>
<td>(15,480)</td>
<td>(25,615)</td>
<td>(28,375)</td>
<td>(29,832)</td>
<td>(38,166)</td>
<td>(37,562)</td>
<td>(32,563)</td>
<td>(31,566)</td>
<td>(34,122)</td>
<td>(34,659)</td>
<td>(39,298)</td>
<td>(39,298)</td>
</tr>
<tr>
<td>% Difference (c/b)</td>
<td>-32%</td>
<td>-26%</td>
<td>-20%</td>
<td>-16%</td>
<td>-17%</td>
<td>-15%</td>
<td>-12%</td>
<td>-11%</td>
<td>-10%</td>
<td>-10%</td>
<td>-9%</td>
<td>-9%</td>
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</table>

Fiscal Year 2020 and 2021 Cumulative Water Sales (AF)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Budget</th>
<th>Actual</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY20</td>
<td>408,524</td>
<td>354,007</td>
<td>(54,517)</td>
</tr>
<tr>
<td>FY21</td>
<td>423,465</td>
<td>384,167</td>
<td>(39,298)</td>
</tr>
<tr>
<td>Total</td>
<td>831,989</td>
<td>738,174</td>
<td>(93,815)</td>
</tr>
<tr>
<td>% Difference</td>
<td>-13%</td>
<td>-9%</td>
<td>-11%</td>
</tr>
</tbody>
</table>
FY21 & FY20 Actual Water Sales

YOA Comparison
FY21 384,167 AF
FY20 354,007 AF
Increase 30,160 AF or 8.5%
Attachment 3

*Budgeted amounts are based on the Adopted Multi-Year Budget for Fiscal Years 2020 and 2021.

**Fiscal Year 2020 Cumulative Water Sales (in millions $)**

<table>
<thead>
<tr>
<th>Months</th>
<th>Jul-20</th>
<th>Aug-20</th>
<th>Sep-20</th>
<th>Oct-20</th>
<th>Nov-20</th>
<th>Dec-20</th>
<th>Jan-20</th>
<th>Feb-20</th>
<th>Mar-20</th>
<th>Apr-20</th>
<th>May-20</th>
<th>Jun-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Actual</td>
<td>$54.2</td>
<td>$60.3</td>
<td>$56.8</td>
<td>$56.9</td>
<td>$45.9</td>
<td>$32.6</td>
<td>$38.5</td>
<td>$40.3</td>
<td>$37.5</td>
<td>$37.9</td>
<td>$51.1</td>
<td>$53.8</td>
</tr>
<tr>
<td>Cumulative Actual (a)</td>
<td>$54.2</td>
<td>$114.5</td>
<td>$171.3</td>
<td>$228.2</td>
<td>$306.7</td>
<td>$345.2</td>
<td>$385.5</td>
<td>$423.0</td>
<td>$460.9</td>
<td>$512.0</td>
<td>$565.8</td>
<td></td>
</tr>
<tr>
<td>Monthly Budget</td>
<td>$67.4</td>
<td>$68.9</td>
<td>$61.7</td>
<td>$54.5</td>
<td>$47.7</td>
<td>$34.4</td>
<td>$35.9</td>
<td>$37.4</td>
<td>$54.0</td>
<td>$54.3</td>
<td>$54.3</td>
<td>$58.9</td>
</tr>
<tr>
<td>Cumulative Budget (b)</td>
<td>$67.4</td>
<td>$136.3</td>
<td>$198.0</td>
<td>$255.5</td>
<td>$310.7</td>
<td>$357.7</td>
<td>$392.1</td>
<td>$428.0</td>
<td>$465.4</td>
<td>$519.4</td>
<td>$573.7</td>
<td>$632.6</td>
</tr>
<tr>
<td>AF Difference (c) (a-b)</td>
<td>$(13.2)</td>
<td>$(21.8)</td>
<td>$(26.7)</td>
<td>$(27.3)</td>
<td>$(35.9)</td>
<td>$(51.0)</td>
<td>$(46.9)</td>
<td>$(42.5)</td>
<td>$(58.5)</td>
<td>$(61.7)</td>
<td>$(66.8)</td>
<td></td>
</tr>
<tr>
<td>% Difference (c/b)</td>
<td>-20%</td>
<td>-16%</td>
<td>-13%</td>
<td>-11%</td>
<td>-12%</td>
<td>-14%</td>
<td>-12%</td>
<td>-10%</td>
<td>-9%</td>
<td>-11%</td>
<td>-11%</td>
<td></td>
</tr>
</tbody>
</table>

**Fiscal Year 2021 Cumulative Water Sales (in millions $)**

<table>
<thead>
<tr>
<th>Months</th>
<th>Jul-20</th>
<th>Aug-20</th>
<th>Sep-20</th>
<th>Oct-20</th>
<th>Nov-20</th>
<th>Dec-20</th>
<th>Jan-20</th>
<th>Feb-20</th>
<th>Mar-20</th>
<th>Apr-20</th>
<th>May-20</th>
<th>Jun-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Actual</td>
<td>$53.6</td>
<td>$60.9</td>
<td>$62.0</td>
<td>$58.3</td>
<td>$47.4</td>
<td>$50.8</td>
<td>$41.6</td>
<td>$38.4</td>
<td>$39.4</td>
<td>$53.0</td>
<td>$55.2</td>
<td>$55.8</td>
</tr>
<tr>
<td>Cumulative Actual (a)</td>
<td>$53.6</td>
<td>$114.5</td>
<td>$176.5</td>
<td>$234.8</td>
<td>$292.2</td>
<td>$333.0</td>
<td>$374.6</td>
<td>$413.0</td>
<td>$452.4</td>
<td>$505.4</td>
<td>$560.6</td>
<td>$616.4</td>
</tr>
<tr>
<td>Monthly Budget</td>
<td>$71.7</td>
<td>$73.3</td>
<td>$65.5</td>
<td>$61.0</td>
<td>$57.7</td>
<td>$50.6</td>
<td>$36.5</td>
<td>$38.3</td>
<td>$39.7</td>
<td>$58.2</td>
<td>$58.3</td>
<td>$63.5</td>
</tr>
<tr>
<td>Cumulative Budget (b)</td>
<td>$71.7</td>
<td>$145.0</td>
<td>$210.5</td>
<td>$271.5</td>
<td>$329.2</td>
<td>$379.8</td>
<td>$416.3</td>
<td>$454.6</td>
<td>$494.3</td>
<td>$552.5</td>
<td>$610.8</td>
<td>$674.3</td>
</tr>
<tr>
<td>AF Difference (c) (a-b)</td>
<td>$(18.1)</td>
<td>$(30.5)</td>
<td>$(34.0)</td>
<td>$(36.7)</td>
<td>$(47.0)</td>
<td>$(46.8)</td>
<td>$(41.7)</td>
<td>$(41.6)</td>
<td>$(41.9)</td>
<td>$(47.1)</td>
<td>$(50.2)</td>
<td>$(57.9)</td>
</tr>
<tr>
<td>% Difference (c/b)</td>
<td>-25%</td>
<td>-21%</td>
<td>-16%</td>
<td>-14%</td>
<td>-14%</td>
<td>-12%</td>
<td>-10%</td>
<td>-9%</td>
<td>-8%</td>
<td>-9%</td>
<td>-8%</td>
<td>-9%</td>
</tr>
</tbody>
</table>

**Water Sales Revenues (in millions $)**

<table>
<thead>
<tr>
<th>FY20</th>
<th>FY21</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>$632.6</td>
<td>$674.3</td>
</tr>
<tr>
<td>Actual</td>
<td>565.8</td>
<td>616.4</td>
</tr>
<tr>
<td>Difference</td>
<td>$(66.8)</td>
<td>$(57.9)</td>
</tr>
<tr>
<td>% Difference</td>
<td>-11%</td>
<td>-9%</td>
</tr>
</tbody>
</table>
*Budgeted amounts are based on the Adopted Multi-Year Budget for Fiscal Years 2020 and 2021, as amended by the Board.

### WATER PURCHASES AND TREATMENT COSTS (in millions $)

**Budget Versus Actual**

**for the 24 Months Ended June 30, 2021**

![Graph showing budget versus actual costs from July 2019 to June 2021.]

#### Fiscal Year 2020 Cumulative Cost of Water Purchases and Treatment (in millions $)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Actual</td>
<td>$43.6</td>
<td>$48.4</td>
<td>$45.5</td>
<td>$45.9</td>
<td>$36.6</td>
<td>$30.8</td>
<td>$26.1</td>
<td>$27.1</td>
<td>$27.7</td>
<td>$29.9</td>
<td>$52.4</td>
<td></td>
</tr>
<tr>
<td>Cumulative Actual (a)</td>
<td>$43.6</td>
<td>$92.0</td>
<td>$137.5</td>
<td>$183.4</td>
<td>$220.0</td>
<td>$250.8</td>
<td>$286.6</td>
<td>$312.7</td>
<td>$339.8</td>
<td>$367.5</td>
<td>$397.4</td>
<td>$449.8</td>
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<tr>
<td>Monthly Budget</td>
<td>$55.4</td>
<td>$56.2</td>
<td>$49.7</td>
<td>$46.4</td>
<td>$43.2</td>
<td>$37.1</td>
<td>$28.0</td>
<td>$29.3</td>
<td>$30.6</td>
<td>$45.5</td>
<td>$45.8</td>
<td>$51.3</td>
</tr>
<tr>
<td>Cumulative Budget (b)</td>
<td>$55.4</td>
<td>$111.6</td>
<td>$161.3</td>
<td>$207.7</td>
<td>$250.9</td>
<td>$288.0</td>
<td>$316.0</td>
<td>$345.3</td>
<td>$375.9</td>
<td>$421.4</td>
<td>$467.2</td>
<td>$518.5</td>
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<tr>
<td>AF Difference (c) (a-b)</td>
<td>$(11.8)</td>
<td>$(19.6)</td>
<td>$(23.8)</td>
<td>$(24.3)</td>
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<td>$(37.2)</td>
<td>$(29.4)</td>
<td>$(32.6)</td>
<td>$(36.1)</td>
<td>$(53.9)</td>
<td>$(69.8)</td>
<td>$(68.7)</td>
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<tr>
<td>% Difference (c/b)</td>
<td>-21%</td>
<td>-18%</td>
<td>-15%</td>
<td>-12%</td>
<td>-12%</td>
<td>-13%</td>
<td>-9%</td>
<td>-9%</td>
<td>-10%</td>
<td>-13%</td>
<td>-15%</td>
<td>-15%</td>
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</tbody>
</table>

#### Fiscal Year 2021 Cumulative Cost of Water Purchases and Treatment (in millions $)

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Actual</td>
<td>$38.2</td>
<td>$45.9</td>
<td>$49.9</td>
<td>$44.8</td>
<td>$43.6</td>
<td>$47.4</td>
<td>$40.1</td>
<td>$37.2</td>
<td>$31.9</td>
<td>$38.3</td>
<td>$44.1</td>
<td>$52.9</td>
</tr>
<tr>
<td>Cumulative Actual (a)</td>
<td>$38.2</td>
<td>$84.1</td>
<td>$134.0</td>
<td>$178.8</td>
<td>$222.4</td>
<td>$269.8</td>
<td>$309.9</td>
<td>$347.1</td>
<td>$379.0</td>
<td>$417.3</td>
<td>$461.4</td>
<td>$514.3</td>
</tr>
<tr>
<td>Monthly Budget</td>
<td>$60.4</td>
<td>$62.2</td>
<td>$54.8</td>
<td>$50.9</td>
<td>$47.5</td>
<td>$41.1</td>
<td>$28.9</td>
<td>$30.5</td>
<td>$31.7</td>
<td>$47.9</td>
<td>$48.1</td>
<td>$53.0</td>
</tr>
<tr>
<td>Cumulative Budget (b)</td>
<td>$60.4</td>
<td>$122.6</td>
<td>$177.4</td>
<td>$228.3</td>
<td>$275.6</td>
<td>$316.9</td>
<td>$345.8</td>
<td>$376.3</td>
<td>$406.0</td>
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<td>$557.0</td>
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<td>$(43.4)</td>
<td>$(49.5)</td>
<td>$(53.4)</td>
<td>$(47.1)</td>
<td>$(35.9)</td>
<td>$(29.2)</td>
<td>$(29.0)</td>
<td>$(38.6)</td>
<td>$(42.6)</td>
<td>$(42.7)</td>
</tr>
<tr>
<td>% Difference (c/b)</td>
<td>-37%</td>
<td>-31%</td>
<td>-24%</td>
<td>-22%</td>
<td>-19%</td>
<td>-15%</td>
<td>-10%</td>
<td>-8%</td>
<td>-8%</td>
<td>-8%</td>
<td>-8%</td>
<td>-8%</td>
</tr>
</tbody>
</table>

### Summary

**Fiscal Year 2020:**
- Budget: $518.5 million
- Actual: $449.8 million
- Difference: $(68.7) million
- % Difference: -13%

**Fiscal Year 2021:**
- Budget: $557.0 million
- Actual: $514.3 million
- Difference: $(42.7) million
- % Difference: -8%

**Total:**
- Budget: $1,075.5 million
- Actual: $964.1 million
- Difference: $(111.4) million
- % Difference: -10%

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### San Diego County Water Authority

**Fiscal Years 2020 and 2021 Budget Status Report**

For the 24 Months Ended June 30, 2021

**Preliminary/Unaudited**

<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Originally Amended</td>
<td>Amended</td>
<td>Period-to-Date</td>
<td>Amended</td>
<td>(Actual to Amended</td>
</tr>
<tr>
<td></td>
<td>Budget</td>
<td>Budget (a)</td>
<td>Actual</td>
<td>Budget</td>
<td>Budget)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Water Sales Revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Sales</td>
<td>$ 1,306,918,978$</td>
<td>$ 1,306,918,978$</td>
<td>$ 1,182,217,296$</td>
<td>$ 124,701,682$</td>
<td>90%</td>
</tr>
<tr>
<td>Water Purchases &amp; Treatment</td>
<td>1,078,463,402</td>
<td>1,075,462,402</td>
<td>964,147,236</td>
<td>111,316,166</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Total Net Water Sales Revenue</strong></td>
<td>228,455,576</td>
<td>231,455,576</td>
<td>218,070,060</td>
<td>(13,385,516)</td>
<td>94%</td>
</tr>
<tr>
<td><strong>Revenues and Other Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure Access Charges</td>
<td>81,656,000</td>
<td>81,656,000</td>
<td>80,863,584</td>
<td>(792,416)</td>
<td>99%</td>
</tr>
<tr>
<td>Property Taxes and In-Lieu Charges</td>
<td>28,304,000</td>
<td>28,304,000</td>
<td>31,758,742</td>
<td>3,454,742</td>
<td>112%</td>
</tr>
<tr>
<td>Investment Income</td>
<td>11,501,000</td>
<td>11,501,000</td>
<td>11,746,165</td>
<td>245,165</td>
<td>102%</td>
</tr>
<tr>
<td>Hydroelectric Revenue</td>
<td>7,350,000</td>
<td>7,350,000</td>
<td>6,432,085</td>
<td>(917,915)</td>
<td>88%</td>
</tr>
<tr>
<td>Grant Reimbursements</td>
<td>27,327,000</td>
<td>27,327,000</td>
<td>16,481,686</td>
<td>(10,845,314)</td>
<td>60%</td>
</tr>
<tr>
<td>Build America Bonds Subsidy</td>
<td>21,104,000</td>
<td>21,104,000</td>
<td>21,275,934</td>
<td>171,934</td>
<td>101%</td>
</tr>
<tr>
<td>Other Income</td>
<td>2,528,000</td>
<td>2,528,000</td>
<td>50,796,998</td>
<td>48,268,998</td>
<td>2009%</td>
</tr>
<tr>
<td><strong>Capital Contributions:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity Charges</td>
<td>33,220,000</td>
<td>33,220,000</td>
<td>36,697,571</td>
<td>3,477,582</td>
<td>110%</td>
</tr>
<tr>
<td>Water Standby Availability Charges</td>
<td>22,221,000</td>
<td>22,221,000</td>
<td>22,332,982</td>
<td>111,982</td>
<td>101%</td>
</tr>
<tr>
<td>Contributions in Aid of Capital Improvement Program (CIP)</td>
<td>1,855,000</td>
<td>1,855,000</td>
<td>4,150,382</td>
<td>2,295,382</td>
<td>224%</td>
</tr>
<tr>
<td><strong>Total Revenues and Other Income</strong></td>
<td>237,066,000</td>
<td>237,066,000</td>
<td>282,536,129</td>
<td>45,470,129</td>
<td>119%</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>465,521,576</td>
<td>465,521,576</td>
<td>500,606,189</td>
<td>32,084,613</td>
<td>107%</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt Service</td>
<td>297,432,000</td>
<td>297,432,000</td>
<td>266,846,349</td>
<td>30,585,651</td>
<td>90%</td>
</tr>
<tr>
<td>QSA Mitigation</td>
<td>4,710,889</td>
<td>4,710,889</td>
<td>4,710,889</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Equipment Replacement</td>
<td>6,024,000</td>
<td>6,024,000</td>
<td>3,088,811</td>
<td>2,935,189</td>
<td>51%</td>
</tr>
<tr>
<td>Grant Expenses</td>
<td>26,323,000</td>
<td>26,323,000</td>
<td>16,555,735</td>
<td>9,767,265</td>
<td>63%</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>3,888,000</td>
<td>3,888,000</td>
<td>50,796,998</td>
<td>(46,881,392)</td>
<td>80%</td>
</tr>
<tr>
<td>Operating Departments (see below)</td>
<td>108,503,282</td>
<td>111,503,285</td>
<td>111,956,341</td>
<td>(453,056)</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>446,881,171</td>
<td>449,881,174</td>
<td>453,927,517</td>
<td>(4,046,343)</td>
<td>101%</td>
</tr>
<tr>
<td><strong>Net Revenues Before CIP</strong></td>
<td>$ 18,640,405</td>
<td>$ 18,640,402</td>
<td>$ 46,678,672</td>
<td>$ 28,038,270</td>
<td>250%</td>
</tr>
<tr>
<td>CIP Expenses*</td>
<td>$ 162,222,000</td>
<td>$ 162,222,000</td>
<td>$ 108,603,215</td>
<td>$ 53,618,785</td>
<td>67%</td>
</tr>
<tr>
<td><strong>Net Fund Withdraws</strong></td>
<td>$ (143,581,595$</td>
<td>$ (143,581,598$</td>
<td>$ (61,924,543$</td>
<td>$ 81,657,055</td>
<td>43%</td>
</tr>
</tbody>
</table>

*(CIP Expenses are all funded by Pay-As-You-Go Fund)*

**Operating Departments Detail**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Services</td>
<td>$ 13,199,531</td>
<td>$ 13,611,163</td>
<td>$ 12,869,593</td>
<td>$ 741,570</td>
<td>95%</td>
</tr>
<tr>
<td>Colorado River Program</td>
<td>3,391,846</td>
<td>3,458,721</td>
<td>3,129,810</td>
<td>329,911</td>
<td>90%</td>
</tr>
<tr>
<td>Engineering</td>
<td>7,737,816</td>
<td>8,007,603</td>
<td>7,925,088</td>
<td>82,515</td>
<td>99%</td>
</tr>
<tr>
<td>Finance</td>
<td>5,216,872</td>
<td>5,480,705</td>
<td>5,232,483</td>
<td>248,222</td>
<td>95%</td>
</tr>
<tr>
<td>General Counsel</td>
<td>6,614,636</td>
<td>6,689,550</td>
<td>6,646,566</td>
<td>42,984</td>
<td>99%</td>
</tr>
<tr>
<td>General Manager &amp; Board of Directors</td>
<td>9,439,491</td>
<td>8,616,751</td>
<td>6,269,940</td>
<td>546,811</td>
<td>92%</td>
</tr>
<tr>
<td>Government Relations</td>
<td>-</td>
<td>1,351,581</td>
<td>1,003,946</td>
<td>347,635</td>
<td>74%</td>
</tr>
<tr>
<td>Human Resources</td>
<td>-</td>
<td>1,551,617</td>
<td>1,276,188</td>
<td>275,429</td>
<td>82%</td>
</tr>
<tr>
<td>MWD Program</td>
<td>3,976,603</td>
<td>4,045,097</td>
<td>3,663,441</td>
<td>381,656</td>
<td>91%</td>
</tr>
<tr>
<td>Operations &amp; Maintenance</td>
<td>41,653,899</td>
<td>42,710,716</td>
<td>41,449,367</td>
<td>1,261,349</td>
<td>97%</td>
</tr>
<tr>
<td>Public Affairs</td>
<td>8,597,925</td>
<td>7,270,725</td>
<td>6,444,914</td>
<td>825,811</td>
<td>89%</td>
</tr>
<tr>
<td>Water Resources</td>
<td>8,674,663</td>
<td>10,509,056</td>
<td>9,440,528</td>
<td>1,068,528</td>
<td>90%</td>
</tr>
<tr>
<td>Actuarial amounts related to Pensions/OPEB</td>
<td>-</td>
<td>-</td>
<td>6,604,477 (n)</td>
<td>(6,604,477)</td>
<td>---</td>
</tr>
<tr>
<td><strong>Total Operating Departments</strong></td>
<td>$ 108,503,282</td>
<td>$ 111,503,285</td>
<td>$ 111,956,341</td>
<td>$ (453,056)</td>
<td>100%</td>
</tr>
</tbody>
</table>
Notes to the Budget Status Report:

a) Period-to-date budgeted amounts are 24/24ths (100%) of Fiscal Years 2020 and 2021 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 $625,709 for Fiscal Year 2020 and $642,733 for Fiscal Year 2021 are received quarterly from the City of San Diego.
d) Investment income excludes unrealized gains/losses, which are non-cash transactions.
e) Hydroelectric revenue budget amount includes Rancho Penasquitos Hydro-generation and Pressure Control Facility (Rancho Hydro) and Lake Hodges Pumped Storage Facility (Hodges Hydro).
f) Capacity charges are primarily received in July, October, January and April, after the quarterly period ends, and accrued revenue are recorded for the quarter ending June.
g) Water standby availability charges are primarily received in January and May.
h) Contributions in aid of capital improvement program include planned reimbursements for miscellaneous projects.
i) Bonds and Certificates of Participation debt service payments are due semi-annually on November 1 and May 1. Pipeline Bonds, Series 2019 debt service payments are due semi-annually on 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, and deferred gain/loss on refunding are excluded because they are non-cash transactions. Short-term debt for Commercial Paper are paid monthly.
j) QSA Mitigation includes: 1) Fiscal Year 2020 contributions of $1,750,000 due July 1 and $1,060,053 due December 31; and 2) Fiscal Year 2021 contributions of $850,000 due July 1 and $1,050,836 due December 31.
k) Amounts include capital equipment purchases included in the project budget.
l) The semi-annual subsidy payments from the United States Treasury equal to 35 percent of the interest payable on the Series 2010B Bonds were reduced under Congressionally-mandated sequestration.
m) Represents withdraws from fund balances.

n) Actuarial amounts related to pension/OPEB for measurement period ended June 30, 2019 and 2020. Actuarial amounts are reported one year in arrears based on receipt of the actuarial valuation report.
o) This includes the $44.4 million MWD settlement payment. The monies received by the Water Authority were disbursed to the Member Agencies.
San Diego County Water Authority
Schedule of Cash and Investments
As of June 30, and May 31, 2021

**Final**

<table>
<thead>
<tr>
<th></th>
<th>June</th>
<th>May</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Fund</td>
<td>$132,137,392</td>
<td>$114,468,417</td>
<td>$81,900,000</td>
</tr>
<tr>
<td>Equipment Replacement Fund</td>
<td>1,353,346</td>
<td>1,449,378</td>
<td></td>
</tr>
<tr>
<td>Canal Maintenance Fund</td>
<td>287,574</td>
<td>271,086</td>
<td></td>
</tr>
<tr>
<td>Rate Stabilization Fund</td>
<td>104,195,654</td>
<td>122,537,533</td>
<td>$74,300,000</td>
</tr>
<tr>
<td><strong>Total Unrestricted Funds (1)</strong></td>
<td>91%</td>
<td>90%</td>
<td>91%</td>
</tr>
<tr>
<td>Pay-As-You-Go Fund (1)</td>
<td>2,000,666</td>
<td>4,465,783</td>
<td></td>
</tr>
<tr>
<td>Debt Service Reserve Funds</td>
<td>22,193,650</td>
<td>22,193,650</td>
<td></td>
</tr>
<tr>
<td><strong>Total Restricted Funds</strong></td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Total Cash and Investments</strong></td>
<td>$262,168,282</td>
<td>$265,385,847</td>
<td></td>
</tr>
</tbody>
</table>

Note:

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

**Reserve Fund Categories**

**Operating Fund:** The Water Authority's working capital and emergency operating reserve. The Operating Fund's policy requires 45 days of average annual operating expenses to be kept in reserves as assessed on an annual basis.

**Stored Water Fund (SWF):** This fund provides working capital to purchase water inventory necessary to fully utilize the Water Authority's storage facilities. A 70,000 acre-feet target was established for Carryover Storage inventory along with a maximum of 100,000 acre-feet, which is the storage capacity. The SWF is to only hold a cash position if the cost to replace the target amount is below the current value of water inventory in the fund.

**Equipment Replacement Fund (ERF):** The ERF is funded by transfers from the Operating Fund for capital equipment purchases such as computers, vehicles, and SCADA systems and is used to replace equipment which has reached the end of its effective useful life.

**Canal Maintenance Fund:** This fund provides for the large periodic maintenance expenses of the All-American and Coachella Canals that is estimated to occur every five to eight years.

**Rate Stabilization Fund (RSF):** The RSF holds the water revenues greater than expenditures in years of strong water sales. Funds can then be used to mitigate "rate shock" in years of weak water sales and/or to manage debt service coverage. The RSF target balance is equal to the financial impact of 2.5 years of wet weather or mandatory restrictions and the maximum fund balance is equal to the financial impact of 3.5 years of wet weather or mandatory restrictions. The current balance in this fund represents approximately 140% of the targeted value of $74.3 million and 99% of the maximum balance of $105.2 million.

**Pay-As-You-Go Fund (PAYGO):** The PAYGO fund collects Capacity Charges and Water Standby Availability Charges to be used to pay for the cash portion of the CIP. The funds are dedicated for construction outlays as well as debt service.

**Debt Service Reserve Fund:** This fund contains the required legal reserve for Water Authority debt issues. Such reserves are held for the purpose of making an issue's annual debt service payments in the event the Water Authority should be unable to make such payments. The funds are held by trustees and interest earned is transferred into the Operating Fund and is not restricted.
BOARD CALENDAR

OCTOBER 2021
• 06 MWD Delegates meeting at 11:00 a.m.
• 14 Special Board Meeting / Workshop 8:00 a.m. Ronald Reagan Community Center, El Cajon
• 28 Committees begin at 9:00 a.m. Formal Board meeting begins at 1:00 p.m.

NOVEMBER 2021
• 03 MWD Delegates meeting at 11:00 a.m.
• 04 Tentative Special Board Meeting 1:30 p.m.
• 18 Combined November/December Board Meeting Committees begin at 9:00 a.m. Formal Board meeting begins at 1:00 p.m.

DECEMBER 2021
• 08 MWD Delegates meeting at 11:00 a.m.

JANUARY 2022
• 05 MWD Delegates meeting at 11:00 a.m.
• 13 Tentative Special Board Meeting 1:30 p.m.
• 27 Committees begin at 9:00 a.m. Formal Board meeting begins at 1:00 p.m.
Notice: Per Governor Newsom's Executive Orders and State Legislation, the below meeting will not be held in person but electronically. Directors will be provided electronic access information separately. The public may access the meeting electronically by going to this web link: https://www.sdcwa.org/meetings-and-documents and then clicking the link listed below “Live Stream” on the right hand side of the page.

Public comment may be submitted by either of these two methods:

(1) Before the meeting, or before public comment closes at the meeting, submit your telephone number by e-mail to the clerk at mnelson@sdcwa.org and the clerk will call you when the board is ready to hear your public comment (three minutes or less); or

(2) Before the meeting, or before public comment closes at the meeting, e-mail your comment to the Water Authority General Counsel at mhattam@sdcwa.org, and time allowing it may be read aloud at the public comment period (three-minute limit).

If modifications or accommodations from individuals with disabilities are required, such persons should provide a request at least 24 hours in advance of the meeting by e-mail to the Water Authority General Counsel at mhattam@sdcwa.org.

Imported Water Committee

Revised Agenda for

September 23, 2021

Eric Heidemann, Chair
Jim Madaffer, Vice Chair
Consuelo Martinez, Vice Chair
Jerry Butkiewicz
Matt Hall
Michael Hogan
Gary Hurst
Terra Lawson-Remer

Valentine Macedo Jr.
Jim Murtland
Jose Preciado
Joel Scalzitti
Nick Serrano
Tim Smith
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/PRESENTATION

1. MWD Issues and Activities Update.
   1-A Metropolitan Water District Delegates report. (Discussion) (Supplemental Materials) MWD Delegates
   1-B Bay-Delta Update. (Presentation) Amy Chen

2. Lake Mead Storage Update. (Presentation) Kelly Rodgers

III. INFORMATION

1. Colorado River Board Representative’s Report. (Supplemental Materials) Jim Madaffer

CLOSED SESSIONS

IV. 1. Conference with Legal Counsel – Existing Litigation
     Government Code §54956.9(d)(1)
     SDCWA v. Metropolitan Water District of Southern California; San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466; CPF-14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350; CPF-18-516389; California Court of Appeal (1st District) Case Nos. A146901; A148266; A154325; A161144; A162168; California Supreme Court Case Nos. S243500; and S251025

     Conference with Real Property Negotiator
     Government Code §54956.8
     Property: QSA Portion of Colorado River Water
     Agency Negotiators: Sandra Kerl, Dan Denham, Scott Slater
     Negotiating Parties: San Diego County Water Authority, Colorado River water users
     Under Negotiations: Terms and Price

     Mark Hattam

Page 143 of 300
3. Conference with Legal Counsel – Anticipated Litigation
   Government Code §54956.9(d)(2)
   One Case

V. ADJOURNMENT

Melinda Nelson
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.
September 15, 2021

Attention: Imported Water Committee

Bay-Delta Update (Presentation)

Purpose
This memo provides an update on various activities that may impact State Water Project (SWP) yield.

Executive Summary
- In the face of a second consecutive year of dry conditions, the State of California is taking several steps to reduce diversions, preserve storage, and protect water quality in the Bay-Delta.
- The Metropolitan Water District of Southern California (MWD) also made operational changes and authorized the purchase of north-of-Delta transfer supplies to preserve its storage along the SWP to support agencies in the MWD service area that typically rely solely on SWP supplies, and thus are referred to as SWP-constrained areas.
- SWP supplies are anticipated to be limited going into 2022 and may continue to be constrained unless hydrology improves significantly.
- The State and water agencies continue working toward voluntary agreements to update and implement the goals of the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) without relying solely on regulation of unimpaired flows.
- The California Department of Water Resources (DWR) is developing environmental and technical documents for the proposed $15.9 billion (in 2020 dollars) single-tunnel Bay-Delta fix. DWR expects to complete the environmental review in 2023.

Background
In three separate proclamations on April 21, May 10, and July 8, 2021, Governor Newsom declared a drought state of emergency that progressively expanded to 50 counties across California. Only eight counties, including San Diego, are not under a state of emergency. These proclamations call on agencies across the state to promote awareness, encourage actions to reduce water use, and prepare for other actions that may be necessary to address drought, temperature, and salinity conditions in the Bay-Delta.

In a July Executive Order, Governor Newsom requested California residents voluntarily reduce water use by 15% compared to 2020. Water Authority General Manager Kerl stated that while the San Diego region’s investments in supplies, storage, and conservation have made it drought-safe this summer, the Water Authority supports the Governor’s call for voluntary conservation to allow agencies to maximize water supplies in collaboration with each other and the state.

Through the Water Authority’s decades-long diversification effort, today, about 10% of the Water Authority’s supplies come from the Bay-Delta through its purchases of MWD supply. As
the hub of water exports for the SWP and Central Valley Project (CVP), the Bay-Delta also supports a critical ecosystem that is home to many endangered species. For decades, the water community has been looking for ways that projects can co-exist with the fragile ecosystem. The most recent solution is a one-tunnel Bay-Delta fix that is currently undergoing environmental review. The Water Authority’s interest in the Bay-Delta fix is two-fold: to ensure the project supports the long-term health of the ecosystem and stabilizes exports, and to ensure costs are allocated properly so the Water Authority’s ratepayers are protected.

**Discussion**

**MWD State Water Project Supplies**

In March 2021, after a second consecutive year of dry hydrology in combination with high temperatures and reduced runoff, DWR lowered the SWP Table A allocation from 10% to 5%, making it the second time in history the final allocation is at 5%. With this allocation, MWD’s Table A supplies are reduced to about 96,000 acre-feet (AF). While MWD has nearly 3.2 million AF in dry-year storage to satisfy its estimated 652,000 AF supply gap for 2021, the availability of annual stored supplies depends on take and/or exchange capacity of its storage portfolio. In addition, there are certain agencies in the MWD service area that, due to MWD infrastructure constraints, typically rely solely on SWP supplies, and thus are referred to as SWP-constrained areas. These agencies are more susceptible to potential shortages when SWP supplies are limited.

In April 2021, to address reduced SWP supplies and preserve storage for SWP-constrained areas should dry conditions persist next year, the MWD board approved the purchase of up to 65,000 AF of north-of-Delta water transfers for up to $675 per AF prior to expected conveyance losses of 20-30%, or about $965 per AF with these losses included. MWD reported it will use monies collected for its budgeted SWP costs, which are variable “pumping and power costs” recovered via MWD’s transportation rates based on a 50% SWP allocation. MWD estimated having almost $100 million dollars in unused SWP funds in fiscal year 2021. This use of SWP funds veers away from MWD’s traditional cost of service to pay for transfers from its Supply Programs budget, which is funded via supply rates.

MWD is also making operational changes to expand deliveries of Colorado River supplies and Diamond Valley Lake storage into areas that typically only receive SWP supplies to preserve SWP and Central Valley storage for SWP-constrained areas. In May, the MWD board approved a program to provide credits to offset increased costs incurred by member agencies that shift their normal operations, at MWD’s request, to instead take deliveries of Colorado River supplies during calendar years 2021 and 2022. This program will compensate the Los Angeles Department of Water and Power for accepting deliveries of treated rather than untreated water to assist MWD in serving SWP-constrained areas, as it did in 2014 and 2015.

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2 MWD rehabilitated the Greg Avenue Pump Station, which can pump roughly 3,000 AF of Colorado River supplies per month into areas typically supplied with SWP supplies.
3 Staff estimated that this action would save over 20,000 AF of SWP supplies in 2021. Overall, MWD estimates its drought actions to preserve SWP supplies will save 150,000 AF in 2021 and 240,000 AF in 2022.
On July 27, DWR and the United States Bureau of Reclamation (Bureau) submitted to the State Water Resources Control Board (State Board) a petition for a temporary change to their project permits to increase flexibility for meeting peak CVP demands. The change would provide the Bureau with the ability to borrow a maximum of 150,000 AF of SWP water from the San Luis Reservoir, provided that it be placed back once CVP operations allow delivery. By the end of 2021, the Bureau will also return 50,000 AF that was transferred to the CVP earlier this year through a different petition.

As of September 14, 2021, Lake Oroville and San Luis Reservoir are at 22% and 12% of capacity, respectively, or 35% and 28% of average for this time of the year.\(^4\) With low end-of-year storage, MWD staff reported it anticipates the initial SWP allocation for 2022 will be 0%, with a roughly even chance of reaching a 20% allocation by the end of 2022. In September, MWD staff reported it is exploring opportunities to withdraw from emergency storage in DWR’s reservoirs in early 2022 to serve SWP-constrained areas in anticipation of the low SWP allocation and to repay any water withdrawn as soon as possible.

Bay-Delta Diversions
Governor Newsom’s May 10 proclamation called on the State Board to consider adopting an emergency regulation to curtail diversions in the Delta watershed to protect supplies for health, safety, and the environment. In June, the State Board sent Notices of Water Unavailability to all water right holders in the Delta watershed. While not orders to stop diverting, these notices alerted post-1914 appropriative water right holders that the State Board determined water supply is insufficient to support diversions under their rights and warned pre-1914 appropriative right holders of impending unavailability. MWD expected this notice to put a portion of its north-of-Delta water transfers at risk; in September, MWD reported it expected to purchase 43,000 AF of transfer supplies, about 66% of its authorization.

On July 23, the State Board released a draft emergency curtailment and reporting regulation for public review and comment and a Notice of Water Unavailability for senior water right holders in the Delta watershed. Adopted on August 3, this requires water right holders in the Delta watershed to curtail their diversions in order of water right priority when the State Board determines water is unavailable for their rights. The regulation will remain in effect for one year unless repealed or readopted. On August 20, the State Board issued curtailment orders through August or September to about 4,500 out of 6,600 right holders in the Delta watershed. On September 2, a group of irrigation districts and the City and County of San Francisco filed suit against the State Board, challenging its authority to curtail diversions.

In July, MWD Bay-Delta Initiatives Manager Arakawa reported that given the notices of unavailability, MWD contacted the lessees on its Delta islands to ensure they are conforming with all relevant drought guidance and regulations. In response to Director Hogan’s question on how the emergency curtailment regulation is affecting MWD’s SWP supplies, Arakawa stated that because most SWP supplies this year are coming from the San Luis Reservoir, which is south of the Delta, the SWP contractors are working to ensure they preserve access to these stored supplies.

\(^4\) As shown on DWR’s Daily Reservoir Storage Summary: [https://bit.ly/3x8Xefq](https://bit.ly/3x8Xefq)
Bay-Delta Salinity
On May 17, DWR and the Bureau filed a Temporary Urgency Change Petition (TUCP) with the State Board, requesting temporary changes to conditions imposed on the SWP and CVP pursuant to State Board Decision 1641 (D-1641) that require meeting flow and salinity objectives in the Bay-Delta Plan. These changes are meant to preserve storage in up-stream reservoirs for uses later in the year. The State Board approved the petition on June 1, reducing Delta outflow requirements from June through July and changing agricultural water quality requirements from June through August 15. While the TUCP was in effect, combined maximum exports at the SWP Banks Pumping Plant and CVP Jones Pumping Plant were generally limited to 1,500 cubic feet per second, excluding transfer supplies.

Additionally, in June, DWR constructed an Emergency Drought Salinity Barrier on the West False River in the Delta to address salinity intrusion and preserve storage in upstream reservoirs. The barrier was exempt from the California Environmental Quality Act (CEQA) as part of Governor Newsom’s emergency proclamations and will be removed no later than November 30, 2021. When Governor Newsom issued his proclamations, DWR was already preparing an Environmental Impact Report (EIR) for the barrier beginning as soon as 2022. The EIR is expected in late August, and the permit would allow construction of the barrier up to two more times over 10 years.

Several non-governmental organizations and other stakeholders objected to these recent actions due to concerns over the potential damage relaxed regulations over SWP and CVP operations in conjunction with drought conditions can cause to the estuary. A coalition of environmental groups and the Winnemem Wintu Tribe, for example, sent a letter to the State Board in March 2021 requesting DWR and the Bureau submit alternative operational scenarios for 2021 that fully implement water quality and temperature objectives, including reducing water exports, to protect fish and wildlife.  

While the State Board approved several emergency measures as the drought progressed, it earlier warned DWR and the Bureau about SWP and CVP violations of D-1641 requirements in an April 30 letter.  

Although the current violations are exacerbated by the extreme dry conditions, they are in part the result of the overallocation of Project water during dry conditions. Additionally, risk management and operational decisions by the Projects were made that appear to have discounted the need to maintain regulatory compliance… [As] we look beyond the current water supply struggle—whether it is unpredictably relieved or extended next year—we cannot revert to managing the Projects as though ensuing years will be “average.”

Voluntary Agreements

5 See the March 12, 2021, letter to the State Board Chair regarding a Request for Immediate Action to Ensure Reasonable Protection of Fish and Wildlife: https://on.nrdc.org/3zQPvEF
6 See the State Board Chair’s letter to DWR and the Bureau regarding Compliance with Water Right Requirements in the Bay-Delta Watershed: https://bit.ly/37911yW
The State Board’s effort to update the Bay-Delta Plan started in 2009 to address southern Bay-Delta salinity and San Joaquin River flow levels. In 2018, the State Board issued a framework to address water quality concerns in the Sacramento River/Delta based on unimpaired flows, which would reduce water exports. Since then, the California Natural Resources Agency has been simultaneously negotiating voluntary agreements with water agencies and some non-governmental organizations to update and implement the goals of the Bay-Delta Plan without relying solely on regulation of unimpaired flows.

In February 2020, Governor Newsom released an updated framework for the voluntary agreements, which called for over $5 billion in funding from the federal and state governments and water users. The governor’s framework included 815,000 to 912,000 AF of flows for the environment, over 60,000 acres of habitat restoration, a science program, and a goal to double salmon populations by 2050. Some non-governmental organizations criticized the voluntary agreement framework for double counting habitat restoration and providing fewer flows than those proposed in the State Board’s updated framework based on unimpaired flows.

Due to differences between the recently adopted operating rules for the SWP and CVP, the state and federal governments have been in litigation since early 2020. Due to the litigation, the voluntary agreement negotiations paused shortly after the Newsom Administration released the updated framework. However, on January 20, 2021, President Biden issued an Executive Order calling for a review of several environmental rules and regulations issued during the Trump Administration, including the biological opinions underlying the SWP and CVP coordinated long-term operations. If this review leads to new federal operating rules that align more closely with state rules, the State may drop its lawsuit against the federal government.

MWD staff reported that water agencies developed an alternative voluntary agreement proposal to present to the Newsom Administration in May, and the Governor released a new proposed framework in August with flow requirements similar to those in the state’s operating rules. The Governor’s May Revise budget proposed $466 million for the voluntary agreements. There have been reports that the Governor and water agencies are working to reach an agreement as soon as possible, and that the term of the agreements has been shortened from 15 years to eight.

In its press release announcing adoption of the emergency curtailment regulation, the State Board encouraged water users to collaborate on the voluntary agreements. However, conservation, environmental justice, fishing groups, and tribes have sent correspondence to both the Biden Administration and state legislators opposing the voluntary agreements and their proposed funding, claiming the groups have been excluded from the “backroom” negotiations, and calling for the State Board to implement its unimpaired flow standards through a public process.7

Bay-Delta Project
At its July 2019 Board meeting, the Water Authority conditionally supported Governor Newsom’s water resilience portfolio approach, including a single-tunnel Bay-Delta project and integrated

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7 See the May 7, 2021, letter to the Secretaries of the Department of the Interior and Department of Commerce: https://on.nrdc.org/3xyiv2g
multi-benefit solutions that address water supply availability and environmental health. The support for the tunnel is contingent upon costs being properly allocated to supply charges to ensure alignment with its purpose to stabilize water supplies, and to ensure Water Authority ratepayers would not be disproportionately impacted due to the Water Authority’s reliance on MWD to transport its independently obtained Colorado River supplies.

The $15.9 billion tunnel would result in a “dual conveyance” system by creating an alternative method for SWP water diversion north of the Delta to complement existing facilities. DWR is preparing a draft EIR, expected in mid-2022. The final EIR is expected in 2023, and DWR expects to secure permits by 2024. DWR will also develop initial operating criteria in its draft environmental documents and adopt final operating criteria following completion of the environmental processes. DWR is hosting public informational webinars between July and September 2021 to provide background related to the draft EIR. These webinars cover operations of the SWP and tunnel, fisheries, climate change, and environmental justice.

MWD estimates the supply benefit of the single tunnel may range from 100,000 AF to 1,000,000 AF annually depending on regulatory decisions such as the implementation of the Bay-Delta Plan framework or voluntary agreements. In December 2020, the MWD board approved funding up to 47.2 percent ($160.8 million) of the $340.7 million project planning costs, representing roughly its own Table A shares.

In August 2020, DWR filed a validation suit to seek judicial affirmation of its authority to issue revenue bonds to finance the proposed tunnel. A number of Bay-Delta water agencies and environmental groups are challenging the validation, arguing it is unlawful because DWR has not yet defined a final project or completed the public environmental review and permitting processes.

The Delta Conveyance Finance Authority, a Joint Powers Authority originally formed by contractors participating in California WaterFix (working with DWR) to issue bonds to finance the twin tunnels, continues to meet on an as-needed basis to complete administrative actions since the shift in direction to a single-tunnel project. The Delta Conveyance Design and Construction Authority, another Joint Powers Authority also originally formed by WaterFix participating contractors to undertake design and construction activities, assists DWR with engineering and field work activities to support the single tunnel’s environmental review process.

*State Water Project Contracts*

In February 2021, MWD executed a SWP contract amendment for water management tools, which will provide more flexibility in managing SWP supplies through transfers and exchanges between contractors in the face of growing supply uncertainties. The amendment became effective February 28, 2021. In September 2020, non-governmental organizations filed two lawsuits challenging DWR’s final EIR and approval of the water management tools amendment based on alleged violations of CEQA, the Delta Reform Act, and the public trust doctrine. MWD and 21 other SWP contractors also executed an amendment to extend the SWP supply contracts through 2085, but

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9 For more information about the webinars, including presentations and video recordings, visit DWR’s Informational Webinars webpage: [https://bit.ly/3ibE8Rv](https://bit.ly/3ibE8Rv)
DWR is waiting for a trial court decision on its lawsuit to validate the contract extension before implementing this amendment.

**Next Steps**
Water Authority staff will continue to monitor activities that affect SWP yields and the Bay-Delta tunnel project and report back to the Board with additional updates as necessary.

Prepared by: Megan Couch, Management Analyst
Reviewed by: Amy Chen, Director of MWD Program
Glenn Farrel, Director of Government Relations
Approved by: Dan Denham, Deputy General Manager
September 15, 2021

Attention: Imported Water Committee

Lake Mead Storage Update. (Presentation)

Purpose
This report provides background on the Lake Mead Storage Program and an update on the Water Authority’s efforts to fully participate in the program to provide regional and basin wide benefits.

Discussion
The Secretary of Interior, through the Bureau of Reclamation, established the 2007 Interim Guidelines to help prevent shortages in the Lower Colorado River Basin and avoid curtailment of uses in the Upper Basin. This has primarily been accomplished through the coordinated operations of Lakes Powell and Mead and utilization of the Intentionally Created Surplus (ICS) storage program in Lake Mead. Under ICS program, water users cannot simply store their annual entitlement water but instead must use conservation programs or other approved methods to produce water that can then be stored for future years. The mechanism that allows for water to be stored in this way is called forbearance, in which users formally recognize water created under the approved ICS projects and agree not to take that water as it would normally be available as it flowed down the priority system.

Along with the adoption of the 2007 Interim Guidelines, a package of agreements was approved that contains the details of the ICS program and a list of approved projects eligible for storage. Under those agreements, the Water Authority’s QSA supplies, consisting of both the IID conserved transfer water and conserved canal lining supplies, are designated as eligible, qualified supplies for Lake Mead storage. Also among that package of agreements was a Memorandum of Agreement between the Water Authority and the Metropolitan Water District of Southern California (MWD) to work towards development of a subaccount to MWD’s ICS storage account for the Water Authority. To date, an MWD subaccount has not been established. Along with continued dialogue with MWD, the Water Authority is evaluating other potential options for participation in the Lake Mead storage program. The Water Authority’s participation in the ICS program would provide benefits to both the region in terms of providing operational flexibility to manage seasonal fluctuations and the Basin States as a whole by helping to maintain a higher level in Lake Mead, which is especially important now with the declined status of the system.

This presentation will overview the ICS Program, review the Water Authority’s effort to secure a storage account in Lake Mead and the associated benefits, provide examples for illustrative purposes of how this could work if an account was secured, and discuss next steps. On August 18, staff provided a similar update to the Member Agency Managers’ Group during a special technical workshop.

Prepared by: Kelly Rodgers, Director of the Colorado River Program
Approved by: Dan Denham, Deputy General Manager
September 15, 2021

Attention: Imported Water Committee

CLOSED SESSION:
Conference with Legal Counsel – Existing Litigation
Government Code §54956.9(d)(1)

Name of Case: SDCWA v. Metropolitan Water District of Southern California;
San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466;
CPF-14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350;
CPF-18-516389; California Court of Appeal (1st District) Case Nos.
A146901; A148266; A154325; A161144; A162168; California Supreme
Court Case Nos. S243500; and S251025

Purpose
This memorandum is to recommend a closed session, pursuant to Government Code
§54956.9(d)(1), to discuss the above-referenced matter at the September 23, 2021 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:  Mark J. Hattam, General Counsel
September 15, 2021

Attention: Imported Water Committee

CLOSED SESSION:
Conference with Real Property Negotiator
Government Code §54956.8
Property: QSA Portion of Colorado River Water
Agency Negotiators: Sandra Kerl, Dan Denham, Scott Slater
Negotiating Parties: San Diego County Water Authority, Colorado River water users
Under Negotiations: Terms and Price

Purpose
This memorandum is to recommend a closed session, pursuant to Government Code §54956.8, to discuss the above-referenced matter at the September 23, 2021 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: Mark J. Hattam, General Counsel
September 15, 2021

Attention: Imported Water Committee

CLOSED SESSION:
Conference with Legal Counsel – Anticipated Litigation
Government Code §54956.9(d)(2)
One Case

Purpose
This memorandum is to recommend a closed session, pursuant to Government Code §54956.9(d)(2), to discuss the above-referenced matter at the September 23, 2021 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: Mark J. Hattam, General Counsel

PUBLIC COMMENT MAY BE SUBMITTED BY EITHER OF THESE TWO METHODS:

(1) BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, SUBMIT YOUR TELEPHONE NUMBER BY E-MAIL TO THE CLERK AT MNELSON@SDCWA.ORG AND THE CLERK WILL CALL YOU WHEN THE BOARD IS READY TO HEAR YOUR PUBLIC COMMENT (THREE MINUTES OR LESS); OR

(2) BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, E-MAIL YOUR COMMENT TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG, AND TIME ALLOWING IT MAY BE READ ALOUD AT THE PUBLIC COMMENT PERIOD (THREE-MINUTE LIMIT).

IF MODIFICATIONS OR ACCOMMODATIONS FROM INDIVIDUALS WITH DISABILITIES ARE REQUIRED, SUCH PERSONS SHOULD PROVIDE A REQUEST AT LEAST 24 HOURS IN ADVANCE OF THE MEETING BY E-MAIL TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG]

LEGISLATION AND PUBLIC OUTREACH COMMITTEE

REVISED AGENDA FOR

SEPTEMBER 23, 2021

Mel Katz, Chair                      Terra Lawson-Reemer
Frank Hilliker, Vice Chair          Consuelo Martinez
Fern Steiner, Vice Chair            Joe Mosca
Jerry Butkiewicz                    Amy Reeh
Chris Cate                          Mona Rios
Gary Croucher                       Elsa Saxod
Craig Elitharp                      John Simpson

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/PRESENTATION

1. Legislative issues.
   1-A Washington report by William Ball.

   1-B Sacramento report by Kristin Olsen and Joe Lang.

2. Small Contractor Outreach and Opportunities Program (SCOOP) Mid-Year and Year-End Review. (Presentation) Christine Antoine

3. Faces of the Water Industry Campaign. (Presentation) Mike Lee

III. INFORMATION

1. Government Relations Update. Glenn Farrel

IV. CLOSED SESSION

V. ADJOURNMENT Melinda Nelson
   Clerk of the Board

NOTE: This meeting is called as a Legislation and Public 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.
September 15, 2021

Attention: Legislation and Public Outreach Committee

Small Contractor Outreach and Opportunities Program (SCOOP) Mid-Year Update and Year-End Review (Presentation)

Background
The purpose of SCOOP is to maximize small business participation in the San Diego County Water Authority’s contracts and procurements. SCOOP provides small businesses with resources and information through training, networking, and technical assistance. This report provides a summary of SCOOP program metrics and activities from January 1, 2021, through June 30, 2021. It also provides a snapshot of data encompassing the 2021 fiscal year.

Discussion
Outreach Activities
During the third and fourth quarters, Water Authority representatives participated in several events with business organizations and government agencies.

A highlight of the outreach activities was attendance at the San Diego Regional Chamber of Commerce’s Small Business Series. The series advocates for a regional business climate that is deliberately supportive and empowering of small businesses. This installment, Resilience and Rebuilding During COVID, focused on resources and updates to guidelines assisting small businesses in recovering. It featured representatives from GO-Biz, Office of the Small Business Advocate, Arc Strategies, and Procopio.

Other major activities that staff participated in were the Caltrans Local Small Business Council and Public Agency Consortium forums. Staff continues to evaluate future projects and potential program modifications to meet the changing procurement market.

Program Measurements
The Water Authority’s total of contract and purchase order awards for the third and fourth quarters was approximately $22 million. Small businesses received approximately $620,000, or 3% of total dollars awarded. Small businesses received awards in several procurement sectors, with $466,000 awarded for professional services and $132,000 awarded for purchase orders. Minority- and women-owned businesses received approximately $190,000. Total public works construction projects awarded during this period totaled approximately $11 million, however, no small businesses received awards. The number of companies receiving contracts or purchase order awards was 236. Of those, 33, or 14%, were small businesses. Eight, or 3%, were minority and women-owned businesses.

For fiscal year 2021, the Water Authority’s cumulative total of contract and purchase order awards was approximately $33 million. Small businesses received approximately $1.2 million, or 4%, of total dollars awarded. Small businesses received awards in several procurement sectors, with $695,000 awarded for professional services and $441,000 awarded for purchase orders. Minority- and women-owned businesses received approximately $373,000.
While the board’s adopted overall program goal for the SCOOP program is 20%, a decrease in activity related to COVID-19 and a limited number of new construction projects has impacted the ability to reach this goal.

Further details are in the attached exhibits. Information on minority-owned and women-owned business participation is made available to the Board for statistical purposes only.

Prepared by: Christine Antoine, Principal Public Affairs Representative
Reviewed by: Denise Vedder, Director of Public Affairs
Approved by: Tish Berge, Assistant General Manager
## EXHIBIT A

### SCOOP Measurements Summary

#### A-1. Small Business Measurements

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<tr>
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<th></th>
<th></th>
<th>FY 2020</th>
<th></th>
<th></th>
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<tr>
<td></td>
<td>Total</td>
<td>Small</td>
<td>% Small</td>
<td>Total</td>
<td>Small</td>
<td>% Small</td>
</tr>
<tr>
<td>1. Number of qualified small businesses capable of bidding on Water Authority projects</td>
<td>1476</td>
<td>422</td>
<td>29%</td>
<td>1592</td>
<td>498</td>
<td>31%</td>
</tr>
<tr>
<td>2. Number of businesses participating on Water Authority procurements (contracts and purchase orders)</td>
<td>390</td>
<td>64</td>
<td>16%</td>
<td>532</td>
<td>112</td>
<td>21%</td>
</tr>
<tr>
<td>3. Number of contracting opportunities</td>
<td>131</td>
<td>23</td>
<td>18%</td>
<td>241</td>
<td>28</td>
<td>12%</td>
</tr>
<tr>
<td>4. Amount committed to small businesses</td>
<td>$32,548,267</td>
<td>$1,183,819</td>
<td>4%</td>
<td>$78,022,430</td>
<td>$6,930,682</td>
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#### A-2. Minority/Women-Owned Business Measurements

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<th></th>
<th>FY 2020</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>M/W</td>
<td>% M/W</td>
<td>Total</td>
<td>M/W</td>
<td>% M/W</td>
</tr>
<tr>
<td>1. Number of qualified M/W businesses capable of bidding on Water Authority projects</td>
<td>1476</td>
<td>341</td>
<td>23%</td>
<td>1592</td>
<td>378</td>
<td>24%</td>
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<tr>
<td>2. Number of businesses participating on Water Authority procurements (contracts and purchase orders)</td>
<td>390</td>
<td>15</td>
<td>4%</td>
<td>532</td>
<td>39</td>
<td>7%</td>
</tr>
<tr>
<td>3. Number of contracting opportunities</td>
<td>131</td>
<td>4</td>
<td>3%</td>
<td>171</td>
<td>12</td>
<td>5%</td>
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<tr>
<td>4. Amount committed to minority and women-owned businesses</td>
<td>$32,548,267</td>
<td>$372,717</td>
<td>1%</td>
<td>$78,022,430</td>
<td>$3,817,864</td>
<td>5%</td>
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</table>
1. Number of businesses registered in The Network to bid on Water Authority projects.

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<tr>
<th></th>
<th>Total</th>
<th>Number of qualified businesses</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Small</td>
<td>1476</td>
<td>422</td>
<td>29%</td>
</tr>
<tr>
<td>Minority- or Women-owned</td>
<td>1476</td>
<td>341</td>
<td>23%</td>
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</tbody>
</table>

*Information taken from The Network’s Business Classification and Minority Company Statistics as of 07/02/2021*

2. Number of businesses participating on Water Authority procurements.

<table>
<thead>
<tr>
<th></th>
<th>FY 2021 (third and fourth quarters)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
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<tr>
<td>Design Build</td>
<td></td>
</tr>
<tr>
<td>Primes</td>
<td>0</td>
</tr>
<tr>
<td>Subs</td>
<td>0</td>
</tr>
<tr>
<td><strong>Design Build Subtotal</strong></td>
<td>0</td>
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<tr>
<td>Construction</td>
<td></td>
</tr>
<tr>
<td>Primes</td>
<td>2</td>
</tr>
<tr>
<td>Subs</td>
<td>0</td>
</tr>
<tr>
<td><strong>Construction Subtotal</strong></td>
<td>2</td>
</tr>
<tr>
<td>Professional Services</td>
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</tr>
<tr>
<td>Primes</td>
<td>56</td>
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<tr>
<td>Subs</td>
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<tr>
<td><strong>Prof. Services Subtotal</strong></td>
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<tr>
<td>Other</td>
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<td>Primes</td>
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<tr>
<td>Subs</td>
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<tr>
<td><strong>Other Subtotal</strong></td>
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<td>Contracts</td>
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<td>Primes</td>
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<td>Subs</td>
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<td><strong>Contracts Subtotal</strong> (Design Build, Construction and Professional Services)</td>
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<td>Vendors</td>
<td>161</td>
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<td><strong>TOTAL</strong></td>
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3. Number of contracting opportunities.

<table>
<thead>
<tr>
<th>FY 2021 (third and fourth quarters)</th>
<th>Total Contracts</th>
<th>Small Primes</th>
<th>% Small</th>
<th>M/W Primes</th>
<th>% M/W</th>
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<tbody>
<tr>
<td>$0-$10,000</td>
<td>25</td>
<td>3</td>
<td>12%</td>
<td>1</td>
<td>4%</td>
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<tr>
<td>$10,001-$150,000</td>
<td>38</td>
<td>9</td>
<td>24%</td>
<td>2</td>
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<tr>
<td>$10,001-$50,000</td>
<td>27</td>
<td>5</td>
<td>19%</td>
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<td>$50,001-$150,000</td>
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<td>$150,001-$250,000</td>
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<td>0</td>
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<td>$250,001 - $1,000,000</td>
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<td>0%</td>
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<td>$1,000,001 - $50,000,000</td>
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<td>0%</td>
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<td>0%</td>
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<tr>
<td>Total</td>
<td>75</td>
<td>12</td>
<td>16%</td>
<td>3</td>
<td>4%</td>
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</table>
4. Amount committed to small businesses.

B-4. Amount committed to small and minority- and women-owned primes, subcontractors and vendors

<table>
<thead>
<tr>
<th>FY 2021 (third and fourth quarters)</th>
<th>Total</th>
<th>Small</th>
<th>% Small</th>
<th>M/W</th>
<th>% M/W</th>
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<tbody>
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<td><strong>Design Build</strong></td>
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<td>Primes</td>
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<tr>
<td>Subs</td>
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<tr>
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<td></td>
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</tr>
<tr>
<td>Primes</td>
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<td>0%</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>Subs</td>
<td>$0</td>
<td>$0</td>
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<td>$0</td>
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<tr>
<td><strong>Construction Subtotal</strong></td>
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<td>0%</td>
<td>$0</td>
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<tr>
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<tr>
<td>Primes</td>
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<tr>
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<tr>
<td><strong>Other Subtotal</strong></td>
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### B-5. Amount committed to small and minority- and women-owned primes, subcontractors and vendors

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<th>FY 2021 YTD</th>
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<td></td>
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<tr>
<td>Subs</td>
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</tr>
<tr>
<td><strong>Design Build Subtotal</strong></td>
<td>$0</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td></td>
</tr>
<tr>
<td>Primes</td>
<td>$11,394,860</td>
</tr>
<tr>
<td>Subs</td>
<td>$0</td>
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<tr>
<td><strong>Construction Subtotal</strong></td>
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<tr>
<td><strong>Professional Services</strong></td>
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EXHIBIT C

**SCOOP Outreach Activities**

January 1, 2021 – June 30, 2021

Water Authority staff attended 5 outreach events with small business, trade, and community organizations, as indicated in the following chart.

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
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<tbody>
<tr>
<td>San Diego Regional Chamber of Commerce – Small Business Series: Resilience and Rebuilding During COVID</td>
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<tr>
<td>Public Agency Consortium (3)</td>
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<td>Caltrans Local Small Business Council</td>
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September 15, 2021

Attention: Legislation and Public Outreach Committee

Faces of the Water Industry Campaign (Presentation)

Purpose
The purpose of this memo is to provide a preview of the Water Authority’s Faces of the Water Industry social media outreach campaign.

Background
This marks the fifth year of the Water Authority’s “Faces of the Water Industry” social media outreach campaign. In partnership with its member agencies, the campaign features the region’s water and wastewater professionals and the essential work that they do to provide safe and reliable water supplies for 3.3 million people and $253 billion economy. The Faces of the Water Industry campaign aligns with priorities developed by the member agencies and the Water Authority to attract more interest and applications for water industry jobs as Baby Boomers retire from the workforce. The campaign was inspired by ACWA’s California Water Professionals Appreciation Week, which runs each October and highlights the important role of water industry professionals and local public water agencies statewide.

Discussion
Each fall, the Water Authority coordinates with member agencies to highlight the stories and careers of water industry professionals through a series of social media posts, videos and other outreach materials including posters and calendars. Over the past four years, the project has featured more than 100 employees from every corner of the water industry, including engineering, operations and maintenance, finance, public affairs, human resources, administration, and information technology. The Water Authority and the member agencies regularly reuse the images and information to promote water jobs, for instance, on the Water News Network and the San Diego WaterWorks website, and as part of the new online digital education workbook.

The Water Authority welcomes all member agencies to participate, coordinates closely with each participating agency and makes campaign graphics and images available to any agency that wishes to supplement significant outreach by the Water Authority. This year’s campaign will include fresh photos and short videos showcasing approximately 20 employees from nine agencies, including the Water Authority, with new social media graphics designed to emphasize how the region’s water agencies work together to serve the region. The posts start October 1 on Facebook, Twitter, LinkedIn and Instagram.

Prepared by: Andrea Mora, Public Affairs Representative II
Reviewed by: Denise Vedder, Director of Public Affairs
Approved by: Tish Berge, Assistant General Manager
September 15, 2021

Attention: Legislation and Public Outreach Committee

Government Relations Update. (Information)

Purpose
This report is an update of the Water Authority’s government relations program.

Discussion

The Legislature
The Legislature adjourned the 2021 legislative session on September 10, and will now be in Interim Recess until it reconvenes for the second year of its two-year legislative session in January 2022. The Governor will now have until October 10 to take final action on all bills approved by the Legislature prior to the conclusion of the legislative session.

Status Report on Legislation and Legislative Positions
Water Authority staff is currently actively reviewing and monitoring 79 bills that have been introduced during the early part of the 2021 legislative session for potential impact on the organization and its member agencies. Staff routinely monitors hundreds of bills during each legislative session as they proceed through the legislative process or are amended. Only those measures that warrant a closer review are analyzed comprehensively and considered for advancement to the Water Authority Board for possible adoption of a position. The Water Authority’s staff and legislative advocates review each bill in the context of the adopted 2021 Legislative Policy Guidelines. The Legislative Policy Guidelines provide direction to staff and the Water Authority’s legislative advocates to communicate support of, or opposition to legislation and amendments. Bills for which staff recommends a position are brought before the Legislation and Public Outreach Committee and the Board for consideration of a Water Authority position. Attached is a list of legislation under review by Water Authority staff as of August 18, 2021.

Lobbyist Activities
Kristin Olsen of California Strategies & Advocacy, and Joe Lang of Lang, Hansen, Giroux, and Kidane, will provide in-person virtual reports of Sacramento activities.

William Ball of Foley & Lardner will provide an in-person virtual report of Washington, D.C. activities.

Prepared by:  Glenn A. Farrel, Director of Government Relations
Approved by:  Tish Berge, Assistant General Manager

Attachment: Monitored Legislation Report
Monitored Legislation
August 18, 2021

**AB 1**

(Garcia, Cristina D) Hazardous waste.

Current Text: Introduced: 12/7/2020  [html](#), [pdf](#)

Introduced: 12/7/2020

Status: 7/14/2021-Failed Deadline pursuant to Rule 61(a)(11). (Last location was E.Q. on 6/9/2021) (May be acted upon Jan 2022)

Summary: Would create the Board of Environmental Safety in the California Environmental Protection Agency. The bill would provide requirements for the membership of the board and would require the board to conduct no less than 6 public meetings per year. The bill would provide for the duties of the board, which would include, among others, reviewing specified policies, processes, and programs within the hazardous waste control laws; proposing statutory, regulatory, and policy changes; and hearing and deciding appeals of hazardous waste facility permit decisions and certain financial assurance decisions.

**AB 9**


Current Text: Amended: 7/14/2021  [html](#), [pdf](#)

Introduced: 12/7/2020

Last Amend: 7/14/2021

Status: 7/14/2021-Read second time and amended. Re-referred to Com. on APPR.

Summary: Would establish in the Department of Conservation the Regional Forest and Fire Capacity Program to support regional leadership to build local and regional capacity and develop, prioritize, and implement strategies and projects that create fire adapted communities and landscapes by improving ecosystem health, community wildfire preparedness, and fire resilience. The bill would require, among other things, the department to, upon an appropriation by the Legislature, provide block grants to regional entities, as defined, to develop regional strategies that develop governance structures, identify wildfire risks, foster collaboration, and prioritize and implement projects within the region to achieve the goals of the program.

**AB 30**

(Kalra D) Outdoor access to nature: environmental equity.

Current Text: Amended: 3/22/2021  [html](#), [pdf](#)

Introduced: 12/7/2020

Last Amend: 3/22/2021

Status: 5/25/2021-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 5/12/2021)(May be acted upon Jan 2022)

Summary: Current law establishes various state agencies, including the Natural Resources Agency, which consists of various departments, including the Department of Conservation, the Department of Fish and Wildlife, and the Department of Parks and Recreation. Current law vests in the Natural Resources Agency various powers, including those related to conservation of lands. Current law establishes, within state agencies, state departments, including the Department of Transportation under the Transportation Agency. This bill would declare that it is the established policy of the state that access to nature and access to the benefits of nature is a human right and that every human has the right to safe and affordable outdoor access, among other things.

**AB 59**

(Gabriel D) Mitigation Fee Act: fees: notice and timelines.

Current Text: Introduced: 12/7/2020  [html](#), [pdf](#)

Introduced: 12/7/2020

Status: 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was L. GOV. on 1/11/2021) (May be acted upon Jan 2022)

Summary: Current law authorizes any party to protest the imposition of a fee, dedication, reservation, or other exactions imposed on a development project within 90 or 120 days of the imposition of the fee, as applicable, and specifies procedures for those protests and actions. The Mitigation Fee Act imposes the same requirements on a local agency for a new or increased fee for public facilities. Current law, for specified fees, requires any judicial action or proceeding to attack, review, set aside, void, or annul an ordinance, resolution, or motion adopting a new fee or service charge or modifying an existing fee or service charge to be commenced within 120 days of the effective date of the ordinance, resolution, or motion. Current law also provides that, if an ordinance, resolution, or motion provides for an automatic adjustment in a fee or service charge and the adjustment results in an increase in the fee or service charge, that any action to attack, review, set aside, void, or annul the increase to be commenced within 120 days of the increase. This bill would increase, for fees and service charges and for fees for specified public facilities, the time for mailing the notice of the time and place of the meeting to at least 45 days before the meeting.

**AB 64**

(Quirk D) Electricity: long-term backup electricity supply strategy.

AB 79  (Committee on Budget)  Budget Act of 2020.
Introduced: 12/7/2020
Last Amend: 4/8/2021
Status: 5/18/2021-Re-referred to Com. on B. & F.R.
Summary: The Budget Act of 2020 made appropriations for the support of state government for the 2020-21 fiscal year. This bill would amend the Budget Act of 2020 by amending and adding items of appropriation and making other changes. This bill would declare that it is to take effect immediately as a Budget Bill.

Introduced: 12/7/2020
Last Amend: 4/15/2021
Summary: Would exclude, for taxable years beginning on or after January 1, 2019, from gross income any advance grant amount, as defined, issued pursuant to specified provisions of the CARES Act or the Consolidated Appropriations Act, 2021, and covered loan amounts forgiven pursuant to the Consolidated Appropriations Act, 2021.

AB 84  (Committee on Budget)  Employment: rehiring and retention: displaced workers.
Introduced: 12/7/2020
Last Amend: 4/8/2021
Status: 5/18/2021-Re-referred to Com. on B. & F.R.
Summary: Would, until December 31, 2024, require an employer, as defined, to offer its laid-off employees specified information about job positions that become available for which the laid-off employees are qualified, and to offer positions to those laid-off employees based on a preference system, in accordance with specified timelines and procedures. The bill would define the term "laid-off employee" to mean any employee who was employed by the employer for 6 months or more in the 12 months preceding January 1, 2020, and whose most recent separation from active service was due to a reason related to the COVID-19 pandemic, including a public health directive, government shutdown order, lack of business, a reduction in force, or other economic, nondisciplinary reason related to the COVID-19 pandemic. The bill would require an employer to keep records for 3 years, including records of communications regarding the offers.

AB 100  (Holden D)  Drinking water: endpoint devices: lead content.
Introduced: 12/11/2020
Last Amend: 6/24/2021
Status: 7/7/2021-From committee: Do pass and re-refer to Com. on APPR with recommendation: To Consent Calendar. (Ayes 7. Noes 0.) (July 7). Re-referred to Com. on APPR.
Summary: The California Safe Drinking Water Act requires the State Water Resources Control Board to administer provisions relating to the regulation of drinking water to protect public health. Current law prohibits, with certain exceptions, the use of any pipe, pipe or plumbing fitting or fixture, solder, or flux that is not lead free in the installation or repair of any public water system or any plumbing in a facility providing water for human consumption. Current law defines "lead free" for purposes of conveying or dispensing water for human consumption to mean not more than 0.2% lead when used with respect to solder and flux and not more than a weighted average of 0.25% lead when used with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures. This bill would, commencing January 1, 2023, prohibit a person from manufacturing, and offering for sale in the state,
an endpoint device, as defined, that does not meet a certain lead leaching standard. The bill would, commencing July 1, 2023, prohibit a person from introducing into commerce or offering for sale in the state an endpoint device that does not meet that lead leaching standard.

**AB 119**  
(Salas D) **County auditor: direct levies.**  
Current Text: Amended: 1/26/2021  
Introduced: 1/14/2021

**AB 125**  
(Rivas, Robert D) **Equitable Economic Recovery, Healthy Food Access, Climate Resilient Farms, and Worker Protection Bond Act of 2022.**  
Current Text: Amended: 4/12/2021  
Introduced: 12/18/2020

**AB 230**  
(Voepel R) **Employment: flexible work schedules.**  
Current Text: Introduced: 1/12/2021  
Introduced: 12/18/2020

**AB 237**  
(Gray D) **Public employment: unfair practices: health protection.**  
Current Text: Amended: 3/1/2021  
Introduced: 1/13/2021

**AB 252**  
(Rivas, Robert D) **Department of Conservation: Multibenefit Land Repurposing Incentive Program: Williamson Act: compatible uses: contracts.**  
Current Text: Amended: 7/14/2021  
Introduced: 1/14/2021
**AB 267**  
(Valadares R)  
California Environmental Quality Act: exemption: prescribed fire, thinning, and fuel reduction projects.  
*Current Text: Amended: 6/2/2021   [html](#).  
Introduced: 1/15/2021*

**AB 280**  
(Rivas, Robert D)  
Electrical corporations: wildfire mitigation plans.  
*Current Text: Introduced: 1/21/2021   [html](#), [pdf](#).  
Introduced: 1/21/2021*

**AB 297**  
(Gallagher R)  
Fire prevention.  
*Current Text: Amended: 4/21/2021   [html](#).  
Introduced: 1/25/2021*

**AB 304**  
(Quirk D)  
Contaminated sites: waste releases or surface or groundwater contamination: local oversight: remedial actions.
(Stone D) Voluntary stream restoration property owner liability: indemnification.
Current Text: Amended: 4/21/2021  html  pdf
Introduced: 1/25/2021
Last Amend: 4/21/2021
Status: 7/7/2021-From committee: Do pass and re-refer to Com. on APPR with recommendation: To Consent Calendar. (Ayes 11. Noes 0.) (July 6). Re-referred to Com. on APPR.
Summary: Current law authorizes a habitat restoration or enhancement project proponent to submit a written request for approval of the project to the Director of Fish and Wildlife. Current law requires the director to approve the project if the written request includes certain information, as specified, and provides for an alternate authorization process by the State Water Resources Control Board. This bill would require the state to indemnify and hold harmless a property owner who voluntarily allows their property to be used for such a project to restore fish and wildlife habitat from civil liability for property damage or personal injury resulting from the project if the project meets specified requirements, including that the project is funded, at least in part, by a state or federal agency whose mission includes restoring habitat for native fish and wildlife, and the liability arises from, and the property owner or any person or entity retained by the property owner does not perform, the construction, design specifications, surveying, planning, supervision, testing, or observation of construction related to the project to restore fish and wildlife habitat.

(Stone D) Voluntary stream restoration property owner liability: indemnification.
Current Text: Amended: 4/21/2021  html  pdf
Introduced: 1/25/2021
Last Amend: 4/21/2021
Status: 7/7/2021-From committee: Do pass and re-refer to Com. on APPR with recommendation: To Consent Calendar. (Ayes 11. Noes 0.) (July 6). Re-referred to Com. on APPR.
Summary: Current law authorizes a habitat restoration or enhancement project proponent to submit a written request for approval of the project to the Director of Fish and Wildlife. Current law requires the director to approve the project if the written request includes certain information, as specified, and provides for an alternate authorization process by the State Water Resources Control Board. This bill would require the state to indemnify and hold harmless a property owner who voluntarily allows their property to be used for such a project to restore fish and wildlife habitat from civil liability for property damage or personal injury resulting from the project if the project meets specified requirements, including that the project is funded, at least in part, by a state or federal agency whose mission includes restoring habitat for native fish and wildlife, and the liability arises from, and the property owner or any person or entity retained by the property owner does not perform, the construction, design specifications, surveying, planning, supervision, testing, or observation of construction related to the project to restore fish and wildlife habitat.

(Salas D) Energy: Electric Program Investment Charge program: biomass.
Introduced: 1/26/2021
Last Amend: 6/24/2021
Status: 7/15/2021-From committee: Be ordered to second reading pursuant to Senate Rule 28.8.
Summary: Current law creates in the State Treasury the Electric Program Investment Charge Fund to be administered by the State Energy Resources Conservation and Development Commission and requires the PUC to forward to the Energy Commission, at least quarterly, moneys for those EPIC programs the PUC has determined should be administered by the Energy Commission for deposit in the fund. Current law requires the Energy Commission, in administering moneys in the fund for research, development, and demonstration programs, to develop and implement the EPIC program for the purpose of awarding funds to projects that may lead to technological advancement and breakthroughs to overcome barriers that prevent the achievement of the state’s statutory energy goals and that may result in a portfolio of projects that are strategically focused and sufficiently narrow to make advancement on the most significant technological challenges. Current law, until January 1, 2023, requires the Energy Commission to expend certain percentages of the moneys appropriated from the fund for technology demonstration and deployment at sites that benefit certain communities. This bill would require the Energy Commission to consider, in the investment planning process for the EPIC program, funding for eligible biomass conversion to energy projects, as specified.

(Lee D) Local government: open and public meetings.
Current Text: Amended: 7/5/2021  html  pdf
Introduced: 1/28/2021
Last Amend: 7/5/2021
Status: 7/14/2021-From committee: Do pass and re-refer to Com. on APPR. (Ayes 9. Noes 0.) (July 13). Re-referred to Com. on APPR.
Summary: The Ralph M. Brown Act requires, with specified exceptions, that all meetings of a legislative body of a local agency, as those terms are defined, be open and public and that all persons be permitted to attend and participate. Under existing law, a member of the legislative body who attends a meeting where action is taken in violation of this provision, with the intent to deprive the public of information that the member knows the public is entitled to, is guilty of a crime. This bill would require

Page 171 of 299
local agencies to conduct meetings subject to the act consistent with applicable state and federal civil rights laws, as specified.

**AB 361**  
(Rivas, Robert  D)  
Open meetings: local agencies: teleconferences.  
**Current Text:** Amended: 7/6/2021  
**Introduced:** 2/1/2021  
**Last Amend:** 7/6/2021  
**Status:** 7/15/2021-Read second time. Ordered to third reading.  
**Summary:** Existing law, the Ralph M. Brown Act requires, with specified exceptions, that all meetings of a legislative body of a local agency, as those terms are defined, be open and public and that all persons be permitted to attend and participate. This bill, until January 1, 2024, would authorize a local agency to use teleconferencing without complying with the teleconferencing requirements imposed by the Ralph M. Brown Act when a legislative body of a local agency holds a meeting during a declared state of emergency, as that term is defined, when state or local health officials have imposed or recommended measures to promote social distancing during a proclaimed state of emergency held for the purpose of determining, by majority vote, whether meeting in person would present imminent risks to the health or safety of attendees, and during a proclaimed state of emergency when the legislative body has determined that meeting in person would present imminent risks to the health or safety of attendees, as provided.

**AB 377**  
(Rivas, Robert  D)  
Water quality: impaired waters.  
**Current Text:** Amended: 4/13/2021  
**Introduced:** 2/1/2021  
**Last Amend:** 4/13/2021  
**Status:** 5/25/2021-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 5/19/2021)(May be acted upon Jan 2022)  
**Summary:** Would require, by January 1, 2023, the State Water Resources Control Board and regional boards to prioritize enforcement of all water quality standard violations that are causing or contributing to an exceedance of a water quality standard in a surface water of the state. The bill would require the state board and regional boards, by January 1, 2025, to evaluate impaired state surface waters and report to the Legislature a plan to bring all water segments into attainment by January 1, 2050. The bill would require the state board and regional boards to update the report with a progress summary to the Legislature every 5 years. The bill would create the Waterway Recovery Account in the Waste Discharge Permit Fund and would make moneys in the Waterway Recovery Account available for the state board to expend, upon appropriation by the Legislature, to bring impaired water segments into attainment in accordance with the plan.

**AB 385**  
(Flora  R)  
Labor Code Private Attorneys General Act of 2004:  
**Current Text:** Introduced: 2/2/2021  
**Introduced:** 2/2/2021  
**Status:** 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was L. & E. on 2/12/2021) (May be acted upon Jan 2022)  
**Summary:** Would prohibit an aggrieved employee from maintaining an action on behalf of themselves or any other aggrieved employee under the Labor Code Private Attorneys General Act of 2004 if certain conditions apply, including if the aggrieved employee has brought an action under the act in conjunction with, or in addition to, claims for monetary damages or penalties for violations of the Labor Code arising out of the same period of employment that occurred between March 4, 2020, and the state of emergency termination date, as defined.

**AB 386**  
(Cooper  D)  
Public Employees' Retirement Fund: investments: confidentiality.  
**Current Text:** Amended: 6/29/2021  
**Introduced:** 2/2/2021  
**Last Amend:** 6/29/2021  
**Status:** 7/14/2021-Failed Deadline pursuant to Rule 61(a)(11). (Last location was JUD. on 6/9/2021) (May be acted upon Jan 2022)  
**Summary:** The California Public Records Act requires state and local agencies to make their records available for public inspection, unless an exemption from disclosure applies. Current law excludes from the disclosure requirement certain records regarding alternative investments in which public investment funds invest. This bill would exempt from disclosure under the act specified records regarding an internally managed private loan made directly by the Public Employees’ Retirement Fund. Under the bill, these records would include quarterly and annual financial statements of the borrower or its constituent owners, unless the information has already been publicly released by the keeper of the information. The bill would prescribe specified exceptions to this exemption from disclosure.

**AB 692**  
(Waldron  R)  
Lake Wohlford Dam: grant funding: liquidation.  
**Current Text:** Amended: 5/25/2021  
**Introduced:** 2/16/2021  
**Last Amend:** 5/25/2021
**Status:** 7/8/2021-From committee: Do pass and re-refer to Com. on APPR with recommendation: To Consent Calendar. (Ayes 8. Noes 0.) (July 8). Re-referred to Com. on APPR.

**Summary:** The Disaster Preparedness and Flood Prevention Bond Act of 2006, approved by the voters as Proposition 1E at the November 7, 2006, statewide general election, authorizes the issuance of bonds in the amount of $4,090,000,000 for the purposes of financing disaster preparedness and flood prevention projects. The act makes $300,000,000 of that amount available, upon appropriation to the Department of Water Resources, for grants for stormwater flood management projects, as specified. Current law appropriates $300,000,000 to the department for those purposes and requires those funds to be available for encumbrance until June 30, 2020, and for liquidation until June 30, 2023. This bill would instead make those funds that were appropriated to the department and allocated to the City of Escondido for use on the Lake Wohlford Dam project available for liquidation until June 30, 2028, if the City of Escondido uses a skilled and trained workforce for the Lake Wohlford Dam project.

**AB 703**  
(Blanca D) Open meetings: local agencies: teleconferences.  
Introduced: 2/16/2021  
Last Amend: 4/29/2021  
Status: 5/7/2021-Failed Deadline pursuant to Rule 61(a)(3). (Last location was L. GOV. on 2/25/2021) (May be acted upon Jan 2021)  
Summary: Current law, by Executive Order N-29-20, suspends the Ralph M. Brown Act’s requirements for teleconferencing during the COVID-19 pandemic, provided that notice requirements are met, the ability of the public to observe and comment is preserved, as specified, and that a local agency permitting teleconferencing have a procedure for receiving and swiftly resolving requests for reasonable accommodation for individuals with disabilities, as specified. This bill would remove the notice requirements particular to teleconferencing and would revise the requirements of the act to allow for teleconferencing subject to existing provisions regarding the posting of notice of an agenda, provided that the public is allowed to observe the meeting and address the legislative body directly both in person and remotely via a call-in option or internet-based service option, and that a quorum of members participate in person from a singular physical location clearly identified on the agenda that is open to the public and situated within the jurisdiction.

**AB 836**  
(Gabriel D) California Building Standards Commission: recycled water: nonpotable water systems.  
 Introduced: 2/17/2021  
Last Amend: 3/25/2021  
Status: 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was E.S. & T.M. on 3/25/2021)(May be acted upon Jan 2022)  
Summary: Would require, on or before January 1, 2023, the California Building Standards Commission to adopt mandatory building standards requiring that a newly constructed nonresidential building be constructed with dual plumbing to allow the use of recycled water for all applicable nonpotable water demands, as defined, if that building is located within an existing or planned recycled water service area, as specified. This bill would require, on or before January 1, 2023,ATHECalifornia Building Standards Commission to adopt mandatory building standards requiring that a newly constructed nonresidential building with a total gross floor area of 100,000 square feet or more be constructed with dual plumbing to allow the use of nonpotable water sources for all applicable nonpotable water demands and provide for the collection, onsite treatment, and reuse of available onsite rainwater, graywater, and foundation drainage.

**AB 897**  
(Mullin D) Office of Planning and Research: regional climate networks: regional climate adaptation and resilience action plans.  
Current Text: Amended: 7/14/2021  html pdf  
Introduced: 2/17/2021  
Last Amend: 7/14/2021  
Status: 7/14/2021-Read second time and amended. Re-referred to Com. on APPR.  
Summary: Current law requires, by July 1, 2017, and every 3 years thereafter, the Natural Resources Agency to update, as prescribed, the state’s climate adaptation strategy, known as the Safeguarding California Plan. Current law establishes the Office of Planning and Research in state government in the Governor’s office. Current law establishes the Integrated Climate Adaptation and Resiliency Program to be administered by the office to coordinate regional and local efforts with state climate adaptation strategies to adapt to the impacts of climate change, as prescribed. This bill would authorize eligible entities, as defined, to establish and participate in a regional climate network, as defined. The bill would require the Office, through the program, to encourage the inclusion of eligible entities with land use planning and hazard mitigation planning authority into regional climate networks. The bill would authorize a regional climate network to engage in activities to address climate change, as specified.

**AB 1207**  
Current Text: Amended: 7/6/2021  html pdf  
Introduced: 2/19/2021
Last Amend: 7/6/2021  
Status: 7/6/2021-Read second time and amended. Re-referred to Com. on APPR.

Summary: Would establish, in the California Health and Human Services Agency, the Pathways Through Pandemics Task Force to study lessons learned from the COVID-19 pandemic and to develop strategies to navigate future pandemics. The bill would require the task force to convene various entities to engage in discussions on the lessons learned from the COVID-19 pandemic, develop and recommend best practices for an equitable response to future pandemics, and determine the impact of state laws on coordinating the response to the COVID-19 pandemic, as specified. The bill would require the task force to report its findings to the Legislature on or before December 1, 2024, and would repeal these provisions as of January 1, 2025.

**AB 1217 (Rodriguez D) Personal protective equipment: stockpile.**  
Current Text: Introduced: 2/19/2021  
Amended: 4/8/2021 html pdf  
Introduced: 2/19/2021  
Last Amend: 4/8/2021  
Status: 5/25/2021-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 5/12/2021)(May be acted upon Jan 2022)  
Summary: Would authorize the State Department of Public Health to rotate PPE in the stockpile by selling the PPE to a nonprofit agency, local government, or provider, and by contracting to purchase PPE on behalf of a local government or provider. The bill would require a nonprofit agency, local government, or provider that obtains PPE pursuant to these provisions to reimburse the department for the costs of the PPE. The bill would also make a technical change to the date in these provisions.

**AB 1250 (Calderon D) Water and sewer system corporations: consolidation of service.**  
Current Text: Introduced: 2/19/2021  
Amended: 7/5/2021 html pdf  
Introduced: 2/19/2021  
Last Amend: 7/5/2021  
Status: 7/7/2021-From committee: Do pass and re-refer to Com. on APPR with recommendation: To Consent Calendar. (Ayes 7. Noes 0.) (July 7). Re-referred to Com. on APPR.  
Summary: The California Safe Drinking Water Act provides for the operation of public water systems, which include small community water systems, and imposes on the State Water Resources Control Board related regulatory responsibilities and duties. Current law authorizes the state board to order consolidation of public water systems where a public water system or state small water system serving a disadvantaged community consistently fails to provide an adequate supply of safe drinking water, as provided. This bill, the Consolidation for Safe Drinking Water Act of 2021, would authorize a water or sewer system corporation to file an application and obtain approval from the Public Utilities Commission through an order authorizing the water or sewer system corporation to consolidate with a small community water system or state small water identified as failing or at risk of failing by the state board.

**AB 1313 (Bigelow R) COVID-19: immunity from civil liability.**  
Current Text: Introduced: 2/19/2021 html pdf  
Introduced: 2/19/2021  
Status: 3/4/2021-Referred to Com. on JUD.  
Summary: Would exempt a business, as defined, from liability for an injury or illness to a person due to coronavirus (COVID-19) based on a claim that the person contracted COVID-19 while at that business, or due to the actions of that business, if the business has substantially complied with all applicable state and local health laws, regulations, and protocols. The bill would define a business to include a sole proprietorship, partnership, corporation, association, or other group, including a nonprofit organization, as specified. The bill would not permit this exception to apply if the injury or illness resulted from a grossly negligent act or omission, willful or wanton misconduct, or unlawful discrimination by the business or an employee of the business. The bill would include related legislative findings.

**AB 1317 (Berman D) Clean energy.**  
Current Text: Introduced: 2/19/2021 html pdf  
Introduced: 2/19/2021  
Status: 5/7/2021-Failed Deadline pursuant to Rule 61(a)(3). (Last location was PRINT on 2/19/2021) (May be acted upon Jan 2021)  
Summary: Current law establishes as policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045. This bill would state the intent of the Legislature to enact subsequent legislation to accelerate the state's progress toward having 100% of electricity provided by renewable or other zero-carbon sources while maintaining a reliable and resilient electricity grid.

**AB 1323 (Chiu D) Department of Technology: modernization: state information technology contracts.**  
Current Text: Amended: 3/26/2021 html pdf
**Summary:** Would require the Department of Technology to identify, assess, and prioritize legacy information technology system modernization efforts across state government. The bill would require state agencies and state entities, as defined, to submit their information technology service contracts to the Department of Technology before May 1, 2022. The bill would require the department to use this information for specified purposes, including analyzing state information technology investment in order to identify types of uses that are candidates for statewide contracts for commonly used or shared services. The bill would also require the Department of Technology and other state agencies and state entities to work with legislative staff and the Legislative Analyst's Office to evaluate potential options to modernize state government information technology project approval and oversight processes. In this regard, the bill would require the Department of Technology to submit various reports to the Legislature, as specified.

**AB 1325 (Burke D) Microgrids: Clean Community Microgrid Incentive Program.**

**Current Text:** Introduced: 2/19/2021  [html](#), [pdf](#)

**Introduced:** 2/19/2021

**Status:** 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was U. & E. on 3/4/2021) (May be acted upon Jan 2022)

**Summary:** Would require the PUC to develop and implement a Clean Community Microgrid Incentive Program by 2022 to fund community microgrids that support the critical needs of vulnerable communities that utilize distributed energy resources for the generation of electricity. The bill would establish the budget for the program in an unspecified amount to be dispersed in successive phases to local public agencies for community microgrid development and would require that expenses incurred by a large electrical corporation to fund the program be allocated to all distribution customers of the large electrical corporation on a nonbypassable basis. The bill would require that a third-party administrator that is not a public utility administer the program.

**AB 1332 (Flora R) Local government ordinances.**

**Current Text:** Introduced: 2/19/2021  [html](#), [pdf](#)

**Introduced:** 2/19/2021

**Status:** 5/7/2021-Failed Deadline pursuant to Rule 61(a)(3). (Last location was PRINT on 2/19/2021) (May be acted upon Jan 2021)

**Summary:** Current law authorizes any local agency to enact any ordinance that adopts a code by reference if the referenced code is specified in the title of the ordinance. Current law requires that after the first reading of the title of the adopting ordinance, and of the title of the code to be adopted thereby, and of the title of the secondary codes therein adopted by reference, the legislative body shall make copies of the primary code and also copies of the secondary codes, if any, being considered for adoption, open to public inspection with the clerk of the legislative body. Current law prohibits, however, the adoption by reference of any penalty clauses that may appear in any code that is adopted by reference; a penalty clause may be enacted only if set forth in full, and published, in the adopting ordinance. This bill would make nonsubstantive changes to the latter provision.

**AB 1365 (Bonta D) Public contracts: clean concrete.**

**Current Text:** Amended: 3/25/2021  [html](#), [pdf](#)

**Introduced:** 2/19/2021

**Last Amend:** 3/25/2021

**Status:** 5/19/2021-Assembly Rule 47.1 invoked. (Berman).

**Summary:** The State Contract Act governs the bidding and award of public works contracts by specific state departments and requires an awarding department, before entering into any contract for a project, to prepare full, complete, and accurate plans and specifications and estimates of cost. This bill would require the Department of General Services, on or before January 1, 2024, to establish and publish a maximum acceptable global warming potential for concrete, as specified. The bill would, beginning January 1, 2022, require an awarding authority to require a winning bidder for an eligible project to submit an Environmental Product Declaration developed in accordance with specified standards prior to installation of any concrete products.

**AB 1376 (Gray D) Water quality: state certification.**

**Current Text:** Introduced: 2/19/2021  [html](#), [pdf](#)

**Introduced:** 2/19/2021

**Status:** 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was E.S. & T.M. on 3/4/2021)(May be acted upon Jan 2022)

**Summary:** The Porter-Cologne Water Quality Control Act authorizes the State Water Resources Control Board to certify or provide a statement to a federal agency, as required pursuant to federal law, that there is reasonable assurance that an activity of any person subject to the jurisdiction of the state board will not reduce water quality below applicable standards. The federal act provides that if a
state fails or refuses to act on a request for this certification within a reasonable period of time, which shall not exceed one year after receipt of the request, then the state certification requirements are waived with respect to the federal application. This bill would require the state board to make the certificate or statement available on its internet website for a 60-day public comment and review period, and would provide that the certificate or statement shall not be final until voted upon by a majority of the members of the state board at the conclusion of that period.

**AB 1384**  (Gabriel D)  **Resiliency Through Adaptation, Economic Vitality, and Equity Act of 2022.**
Current Text: Amended: 7/14/2021  [html][pdf]
Introduced: 2/19/2021
Last Amend: 7/14/2021
Status: 7/14/2021-Read second time and amended. Re-referred to Com. on APPR.
Summary: Current law requires the Natural Resources Agency to update every 3 years the state’s climate adaptation strategy, known as the Safeguarding California Plan, and to coordinate with other state agencies to identify vulnerabilities to climate change by sectors and priority actions needed to reduce the risks in those sectors. Current law requires, to address the vulnerabilities identified in the plan, state agencies to maximize specified objectives. This bill would require the agency to also coordinate with the Office of Planning and Research and identify, among other things, vulnerabilities to climate change for vulnerable communities, an operational definition of “climate resilience” for each sector and for vulnerable communities, special protections of vulnerable communities and industries that are disproportionately impacted by climate change, and timetables and specific metrics to measure the state’s progress in implementing the plan.

**AB 1399**  (Flora R)  **Diversion or use of water: penalties.**
Current Text: Introduced: 2/19/2021  [html][pdf]
Introduced: 2/19/2021
Status: 5/7/2021-Failed Deadline pursuant to Rule 61(a)(3). (Last location was PRINT on 2/19/2021) (May be acted upon Jan 2021)
Summary: Under current law, the diversion or use of water other than as authorized by specified provisions of law is a trespass, subject to specified civil liability. This bill would make nonsubstantive changes to those provisions.

**AB 1428**  (Quirk D)  **Safe Drinking Water Act: applicability.**
Current Text: CHAPTERED: 7/9/2021  [html][pdf]
Introduced: 2/19/2021
Status: 7/9/2021-Approved by the Governor. Chaptered by Secretary of State - Chapter 64, Statutes of 2021.
Summary: Under current law, a water district, as defined, in existence prior to May 18, 1994, that provides primarily agricultural services through a piped water system with only incidental residential or similar uses is not considered to be a public water system under specified conditions, including the system certifying that it is providing alternative water for residential or similar uses for drinking water and cooking to achieve the equivalent level of public health protection provided by the applicable primary drinking water regulations. This bill would remove the above provision authorizing those water districts to certify that they are providing alternative water for residential or similar uses to achieve the equivalent level of public health protection provided by the applicable primary drinking water regulations.

**AB 1434**  (Friedman D)  **Urban water use objectives: indoor residential water use.**
Current Text: Amended: 4/19/2021  [html][pdf]
Introduced: 2/19/2021
Last Amend: 4/19/2021
Status: 5/25/2021-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. on 4/27/2021) (May be acted upon Jan 2022)
Summary: Would establish, beginning January 1, 2023, until January 1, 2025, the standard for indoor residential water use as 48 gallons per capita daily. The bill would establish, beginning January 1, 2025, the standard as 44 gallons per capita daily and, beginning January 1, 2030, 40 gallons per capita daily.

**AB 1458**  (Frazier D)  **Fish and wildlife protection and conservation: lake and streambed alteration agreements: exemptions**
Current Text: Introduced: 2/19/2021  [html][pdf]
Introduced: 2/19/2021
Status: 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was W.,P. & W. on 3/11/2021) (May be acted upon Jan 2022)
Summary: Current law prohibits a person, a state or local governmental agency, or a public utility from substantially diverting or obstructing the natural flow of, or substantially changing or using any material from the bed, channel, or bank of, any river, stream, or lake, or depositing or disposing of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass
into any river, stream, or lake, unless prescribed requirements are met, including written notification to the Department of Fish and Wildlife regarding the activity. Current law requires the department to determine whether the activity may substantially adversely affect an existing fish and wildlife resource and, if so, to provide a draft lake or streambed alteration agreement to the person, agency, or utility. Current law prescribes various requirements for lake and streambed alteration agreements. Current law also establishes various exemptions from these provisions. This bill would additionally exempt from these provisions vegetation management or fuels treatment projects undertaken, carried out, or approved by a state or local governmental agency necessary to prevent or mitigate the threat or intensity of a wildfire.

**AB 1460**  
**Bigelow R**  
**State employment: COVID-19 telework: costs.**  
Current Text: Introduced: 2/19/2021  
Introduced: 2/19/2021  
Status: 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was P.E. & R. on 3/11/2021)(May be acted upon Jan 2022)  
Summary: Would authorize CalHR to provide a one-time payment of an unspecified amount to employees who have been required to telework as a result of the COVID-19 pandemic in order to offset costs associated with working remotely.

**AB 1500**  
**Garcia, Eduardo D**  
**Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2022.**  
Current Text: Amended: 5/11/2021  
Introduced: 2/19/2021  
Last Amend: 5/11/2021  
Status: 5/20/2021-Joint Rule 62(a), file notice suspended. From committee: Do pass and re-refer to Com. on RLS. (Ayes 12. Noes 3.) (May 20). Re-referred to Com. on RLS.  
Summary: Would enact the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2022, which, if approved by the voters, would authorize the issuance of bonds in the amount of $7,080,000,000 pursuant to the State General Obligation Bond Law to finance projects for safe drinking water, wildfire prevention, drought preparation, flood protection, extreme heat mitigation, and workforce development programs.

**ACA 1**  
**Aguiar-Curry D**  
**Local government financing: affordable housing and public infrastructure: voter approval.**  
Current Text: Introduced: 12/7/2020  
Introduced: 12/7/2020  
Status: 4/22/2021-Referred to Coms. on L. GOV. and APPR.  
Summary: The California Constitution prohibits the ad valorem tax rate on real property from exceeding 1% of the full cash value of the property, subject to certain exceptions. This measure would create an additional exception to the 1% limit that would authorize a city, county, city and county, or special district to levy an ad valorem tax to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of public infrastructure, affordable housing, or permanent supportive housing, or the acquisition or lease of real property for those purposes, if the proposition proposing that tax is approved by 55% of the voters of the city, county, or city and county, as applicable, and the proposition includes specified accountability requirements.

**ACR 17**  
**Voepel R**  
**Special Districts Week.**  
Current Text: Chaptered: 7/1/2021  
Introduced: 2/1/2021  
Status: 6/24/2021-Chaptered by Secretary of State- Chapter 54, Statutes of 2021  
Summary: This measure proclaims the week of May 16, 2021, to May 22, 2021, to be Special Districts Week.

**SB 1**  
**Atkins D**  
**Coastal resources: sea level rise.**  
Current Text: Amended: 6/24/2021  
Introduced: 12/7/2020  
Last Amend: 6/24/2021  
Status: 7/14/2021-July 14 set for first hearing. Placed on suspense file.  
Summary: The California Coastal Act of 1976 establishes the California Coastal Commission and provides for planning and regulation of development in the coastal zone, as defined. The act requires the commission, within 90 days after January 1, 1977, to adopt, after public hearing, procedures for the preparation, submission, approval, appeal, certification, and amendment of a local coastal program, including a common methodology for the preparation of, and the determination of the scope of, the local coastal programs, as provided. This bill would also include, as part of the procedures the commission is required to adopt, recommendations and guidelines for the identification, assessment, minimization, and mitigation of sea level rise within each local coastal program, as provided. The bill would delete the timeframe specified above by which the commission is required to adopt these
procedures.

**SB 5**  
(Atkins D) **Affordable Housing Bond Act of 2022.**  
Current Text: Amended: 3/10/2021  [html](#), [pdf](#)  
Introduced: 12/7/2020  
Last Amend: 3/10/2021  
Status: 3/18/2021-Re-referred to Coms. on HOUSING and GOV. & F.  
Summary: Would enact the Affordable Housing Bond Act of 2022, which, if adopted, would authorize the issuance of bonds in the amount of $6,500,000,000 pursuant to the State General Obligation Bond Law. Proceeds from the sale of these bonds would be used to fund affordable rental housing and homeownership programs. The bill would state the intent of the Legislature to determine the allocation of those funds to specific programs. This bill would provide for submission of the bond act to the voters at the November 8, 2022, statewide general election in accordance with specified law.

**SB 12**  
(McGuire D) **Local government: planning and zoning: wildfires.**  
Current Text: Amended: 7/1/2021  [html](#), [pdf](#)  
Introduced: 12/7/2020  
Last Amend: 7/1/2021  
Status: 7/14/2021-Failed Deadline pursuant to Rule 61(a)(11). (Last location was H. & C.D. on 6/24/2021)(May be acted upon Jan 2022)  
Summary: Current law requires that the Office of Planning and Research, among other things, coordinate with appropriate entities, including state, regional, or local agencies, to establish a clearinghouse for climate adaptation information for use by state, regional, and local entities, as provided. This bill would require the safety element, upon the next revision of the housing element or the hazard mitigation plan, on or after July 1, 2024, whichever occurs first, to be reviewed and updated as necessary to include a comprehensive retrofit strategy to reduce the risk of property loss and damage during wildfires, as specified, and would require the planning agency to submit the adopted strategy to the Office of Planning and Research for inclusion into the above-described clearinghouse.

**SB 33**  
(Cortese D) **Apprenticeship: annual report: task force.**  
Current Text: Amended: 4/7/2021  [html](#), [pdf](#)  
Introduced: 12/7/2020  
Last Amend: 4/7/2021  
Status: 6/17/2021-Re-referred to Com. on RLS. pursuant to Assembly Rule 96.  
Summary: Would require the Director of Industrial Relations, on or before September 1, 2022, to convene a task force to promote apprenticeship for all populations throughout the state, to be known as the Construction Apprenticeship Advancement Task Force, with membership as prescribed. The bill would require the task force, in consultation with specified entities, to study the recruitment, retention, and barriers to entry of women and other minority, underrepresented, and disadvantaged populations in the State of California for purposes of ensuring apprenticeship opportunities are more inclusive of those populations.

**SB 45**  
(Portantino D) **Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2022.**  
Introduced: 12/7/2020  
Last Amend: 4/8/2021  
Status: 6/1/2021-Ordered to inactive file on request of Senator Portantino.  
Summary: Would enact the Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2022, which, if approved by the voters, would authorize the issuance of bonds in the amount of $5,595,000,000 pursuant to the State General Obligation Bond Law to finance projects for a wildfire prevention, safe drinking water, drought preparation, and flood protection program.

**SB 52**  
(Dodd D) **State of emergency: local emergency: planned power outage.**  
Current Text: Amended: 4/12/2021  [html](#), [pdf](#)  
Introduced: 12/7/2020  
Last Amend: 4/12/2021  
Status: 7/12/2021-From consent calendar on motion of Assembly Member Aguiar-Curry. Ordered to third reading.  
Summary: Would define a 'deenergization event' as a planned power outage, as specified, and would make a deenergization event one of those conditions constituting a local emergency, with prescribed limitations.

**SB 54**  
(Allen D) **Plastic Pollution Producer Responsibility Act.**  
Current Text: Amended: 2/25/2021  [html](#), [pdf](#)

Current Text: Amended: 6/16/2021 html pdf
Introduced: 12/7/2020
Last Amend: 6/16/2021
Status: 7/13/2021-From committee: Do pass and re-refer to Com. on APPR. (Ayes 8. Noes 0.) (July 12). Re-referred to Com. on APPR.
Summary: Would, among other things, require the Director of Forestry and Fire Protection to identify areas of the state as moderate and high fire hazard severity zones and would require a local agency to make this information available for public review and comment, as provided. By expanding the responsibility of a local agency, the bill would impose a state-mandated local program. This bill would also make conforming changes.


Current Text: Amended: 7/5/2021 html pdf
Introduced: 12/28/2020
Last Amend: 7/5/2021
Status: 7/5/2021-Read second time and amended. Re-referred to Com. on APPR.
Summary: Current law establishes within the Natural Resources Agency the State Energy Resources Conservation and Development Commission. Current law assigns the commission various duties, including applying for and accepting grants, contributions, and appropriations, and awarding grants consistent with the goals and objectives of a program or activity the commission is authorized to implement or administer. This bill, the Community Energy Resilience Act of 2021, would require the commission to develop and implement a grant program for local governments to develop community energy resilience plans and expedite permit review of distributed energy resources by local governments.

SB 222 (Dodd D) Water Rate Assistance Program.

Current Text: Amended: 7/15/2021 html pdf
Introduced: 1/14/2021
Last Amend: 7/15/2021
Status: 7/15/2021-From committee with author's amendments. Read second time and amended. Re-referred to Com. on APPR.
Summary: Would establish the Water Rate Assistance Fund in the State Treasury to help provide water affordability assistance, for both drinking water and wastewater services, to low-income ratepayers and ratepayers experiencing economic hardship in California. The bill would require the Department of Community Services and Development to develop and administer the Water Rate Assistance Program established by the bill.

SB 223 (Dodd D) Discontinuation of residential water service.

Introduced: 1/14/2021
Last Amend: 5/3/2021
Status: 5/25/2021-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 5/17/2021)(May be acted upon Jan 2022)
Summary: Current law requires an urban and community water system to have a written policy on discontinuation of residential service for nonpayment, including, among other things, specified options for addressing the nonpayment. Current law requires an urban and community water system to provide notice of that policy to customers, as provided. This bill would apply those provisions, on and after July 1, 2022, to a very small community water system, defined as a public water system that supplies water to 200 or fewer service connections used by year long residents.

SB 230 (Portantino D) State Water Resources Control Board: Constituents of Emerging Concern Program.

Current Text: Introduced: 1/19/2021 html pdf
Introduced: 1/19/2021
Status: 5/25/2021-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. on 3/15/2021) (May be acted upon Jan 2022)
Summary: Would require the State Water Resources Control Board to establish, maintain, and direct an ongoing, dedicated program called the Constituents of Emerging Concern Program to assess the state of information and recommend areas for further study on, among other things, the occurrence of constituents of emerging concern (CEC) in drinking water sources and treated drinking water. The bill would require the state board to convene, by an unspecified date, the Science Advisory Panel to review and provide recommendations to the state board on CEC for further action, among other duties. The bill would require the state board to provide an annual report to the Legislature on the ongoing work conducted by the panel.

**SB 259**  
(Wilk R) Public Utilities Commission: oversight of electrical corporations.  
Current Text: Introduced: 1/26/2021 html pdf  
Introduced: 1/26/2021  
Status: 2/22/2021-Art. IV. Sec. 8(a) of the Constitution dispensed with. (Ayes 32. Noes 4.) Joint Rule 55 suspended. (Ayes 32. Noes 4.)  
Summary: Would state the intent of the Legislature to enact legislation to strengthen the Public Utilities Commission's oversight of electrical corporations' efforts to reduce their fire risk and use of deenergization events.

**SB 260**  
(Wiener D) Climate Corporate Accountability Act.  
Current Text: Amended: 4/19/2021 html pdf  
Introduced: 1/26/2021  
Last Amend: 4/19/2021  
Status: 5/25/2021-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 5/17/2021) (May be acted upon Jan 2022)  
Summary: Would require the State Air Resources Board, on or before January 1, 2023, to develop and adopt regulations requiring United States-based partnerships, corporations, limited liability companies, and other business entities with total annual revenues in excess of $1,000,000,000 and that do business in California, defined as "reporting entities," to publicly disclose, starting in 2024 on a date to be determined by the state board, and annually thereafter, their greenhouse gas emissions, categorized as scope 1, 2, and 3 emissions, as defined, from the prior calendar year.

**SB 274**  
(Wieckowski D) Local government meetings: agenda and documents.  
Introduced: 1/29/2021  
Last Amend: 4/5/2021  
Status: 7/8/2021-Read second time. Ordered to third reading.  
Summary: The Ralph M. Brown Act requires meetings of the legislative body of a local agency to be open and public and also requires regular and special meetings of the legislative body to be held within the boundaries of the territory over which the local agency exercises jurisdiction, with specified exceptions. Current law authorizes a person to request that a copy of an agenda, or a copy of all the documents constituting the agenda packet, of any meeting of a legislative body be mailed to that person. This bill would require a local agency with an internet website, or its designee, to email a copy of, or website link to, the agenda or a copy of all the documents constituting the agenda packet if the person requests that the items be delivered by email. If a local agency determines it to be technologically infeasible to send a copy of the documents or a link to a website that contains the documents by email or by other electronic means, the bill would require the legislative body or its designee to send by mail a copy of the agenda or a website link to the agenda and to mail a copy of all other documents constituting the agenda packet, as specified.

**SB 297**  
(Durazo D) Subsurface installations: penalties.  
Introduced: 2/3/2021  
Last Amend: 3/25/2021  
Status: 7/1/2021-Read second time. Ordered to third reading.  
Summary: Would enact the Wade Kilpatrick Gas Safety and Workforce Adequacy Act of 2021. The bill would prescribe a civil penalty of up to $100,000 to be imposed on an operator or excavator, as described, who knowingly and willfully violates provisions relating excavations and subsurface installations and subsequently damages a gas or hazardous liquid pipeline subsurface installation and the damage results in the escape of any flammable, toxic, or corrosive gas or liquid.

**SB 323**  
(Caballero D) Local government: water or sewer service: legal actions.  
Current Text: Amended: 7/7/2021 html pdf  
Introduced: 2/5/2021  
Last Amend: 7/7/2021  
Status: 7/7/2021-From committee with author's amendments. Read second time and amended. Referred to Com. on APPR.  
Summary: Current law prohibits a local agency from imposing fees for specified purposes, including...
fees for water or sewer connections, as defined, that exceed the estimated reasonable cost of providing the service for which the fee is charged, unless voter approval is obtained. Existing law provides that a local agency levying a new water or sewer connection fee or increasing a fee must do so by ordinance or resolution. Current law requires, for specified fees, including water or sewer connection fees, any judicial action or proceeding to attack, review, set aside, void, or annul an ordinance, resolution, or motion adopting a new fee or service charge or modifying an existing fee or service charge to be commenced within 120 days of the effective date of the ordinance, resolution, or motion according to specified procedures for validation proceedings. This bill would require any judicial action or proceeding to attack, review, set aside, void, validate, or annul an ordinance, resolution, or motion adopting, modifying, or amending water or sewer service fees or charges adopted after January 1, 2022, to be commenced within 120 days of the date of final passage, adoption, or approval of the ordinance, resolution, or motion, except as provided.

**SB 351**  
(Caballero D) **Water Innovation Act of 2021.**  
Current Text: Amended: 4/20/2021  html | pdf  
Introduced: 2/9/2021  
Last Amend: 4/20/2021  
Status: 5/25/2021-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 5/10/2021)(May be acted upon Jan 2022)  
Summary: Current law establishes the State Water Resources Control Board for the purposes of providing for the orderly and efficient administration of the water resources of the state. This bill, the Water Innovation Act of 2021, would create the Office of Water Innovation at the California Water Commission for the furtherance of new technologies and other innovative approaches in the water sector. The bill would require the office, by December 31, 2023, to take specified measures to advance innovation in the water sector. The bill would make findings and declarations regarding the need for water innovation.

**SB 482**  
(Hueso D) **Salton Sea: long-term strategy.**  
Current Text: Amended: 4/7/2021  html | pdf  
Introduced: 2/17/2021  
Last Amend: 4/7/2021  
Status: 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was N.R. & W. on 3/18/2021)(May be acted upon Jan 2022)  
Summary: Current law, including the Salton Sea Restoration Act, specifies various sources of funding for Salton Sea restoration and mitigation projects, and provides for the allocation of various responsibilities among state agencies and regional water agencies for implementation and administration of those projects. This bill would require the secretary to work with local stakeholders to develop a long-term strategy for the Salton Sea. The bill would require the long-term strategy to, among other things, assess the environmental impacts and economic viability of the Salton Sea, identify challenges to enacting a long-term strategy, and provide recommendations for addressing the identified challenges.

**SB 526**  
(Min D) **Community water systems: lead user service lines.**  
Current Text: Introduced: 2/17/2021  html | pdf  
Introduced: 2/17/2021  
Status: 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was E.Q. on 2/25/2021) (May be acted upon Jan 2022)  
Summary: Current law requires, by July 1, 2020, a community water system with known lead user service lines in use in its distribution system to provide a timeline for replacement of those lines to the State Water Resources Control Board. Current law requires the state board to review and approve an established timeline, and requires, if the state board fails to act within 30 days of the submission of the timeline, the timeline to be deemed approved. Current law authorizes the state board to enforce these requirements, as specified, and a violation is considered a violation of the California Safe Drinking Water Act, subjecting the violator to specified civil and criminal penalties. This bill would, until January 1, 2025, require a community water system to remove or replace the full lead user service line, if the community water system disturbs, removes, or replaces a portion thereof. The bill would apply the above-described enforcement provisions to a violation of the requirements of the bill, thereby creating a state-mandated local program by expanding the scope of crimes under the California Safe Drinking Water Act.

**SB 527**  
(Melendez R) **Greenhouse Gas Reduction Fund: high-speed rail: Salton Sea restoration.**  
Current Text: Introduced: 2/17/2021  html | pdf  
Introduced: 2/17/2021  
Status: 4/30/2021-Failed Deadline pursuant to Rule 61(a)(2). (Last location was E.Q. on 2/25/2021) (May be acted upon Jan 2022)  
Summary: Would eliminate the continuous appropriation of 25% of the annual proceeds of Greenhouse Gas Reduction Fund to the High-Speed Rail Authority on June 30, 2022. The bill, beginning with the 2022–23 fiscal year, would annually transfer 25% of the annual proceeds of the Greenhouse
SB 559  
**Hurtado D**  Department of Water Resources: water conveyance systems: Canal Conveyance Capacity Restoration Fund.

Current Text: Amended: 6/14/2021  html, pdf

Introduced: 2/18/2021

Last Amend: 6/14/2021

Status: 7/1/2021-Coauthors revised. From committee: Do pass and re-refer to Com. on APPR. (Ayes 11. Noes 0.) (July 1). Re-referred to Com. on APPR.

Summary: Would establish the Canal Conveyance Capacity Restoration Fund in the State Treasury to be administered by the Department of Water Resources. The bill would require all moneys deposited in the fund to be expended, upon appropriation by the Legislature, in support of subsidence repair costs, including environmental planning, permitting, design, and construction and necessary road and bridge upgrades required to accommodate capacity improvements. The bill would require the department to expend from the fund, upon appropriation by the Legislature, specified monetary amounts to restore the capacity of 4 specified water conveyance systems, as prescribed, with 2 of those 4 expenditures being in the form of a grant to the Friant Water Authority and to the San Luis and Delta-Mendota Water Authority. The bill would make operation of these provisions contingent on specified conditions being met. The bill would make these provisions inoperative on July 1, 2030, and would repeal the provisions as of January 1, 2031.

SB 646  

Current Text: Amended: 7/14/2021  html, pdf

Introduced: 2/19/2021

Last Amend: 7/14/2021

Status: 7/14/2021-Read second time and amended. Re-referred to Com. on APPR.

Summary: Current law requires a person or entity that employs one or more janitors or otherwise engages by contract, subcontract, or franchise agreement for the provision of janitorial services, as specified, to register with the Labor Commissioner as a property service employer annually and prohibits them from conducting business without a registration. This bill would except from the Labor Code Private Attorneys General Act of 2004 a janitorial employee, as defined, represented by a labor organization that has represented janitors before January 1, 2021, and employed by a janitorial contractor who registered with the commissioner as a property service employer in calendar year 2020, with respect to work performed under a valid collective bargaining agreement in effect any time before July 1, 2024, that contains certain provisions, including, among others, a grievance and binding arbitration procedure to redress violations that authorizes the arbitrator to award otherwise available remedies.

SB 657  

Current Text: Chaptered: 7/16/2021  html, pdf

Introduced: 2/19/2021

Last Amend: 4/22/2021

Status: 7/16/2021-Approved by the Governor. Chaptered by Secretary of State. Chapter 109, Statutes of 2021.

Summary: Current law regulates the wages, hours, and working conditions of any worker employed in any occupation, trade, or industry, whether compensation is measured by time, piece, or otherwise, except as specified. This bill would provide that, in any instance in which an employer is required to physically post information, an employer may also distribute that information to employees by email with the document or documents attached. The bill would specify that this does not alter the employer’s obligation to physically display the required posting.

SB 698  
**Grove R**  Water rights: reasonable and beneficial use of water.

Current Text: Introduced: 2/19/2021  html, pdf

Introduced: 2/19/2021

Status: 3/3/2021-Referred to Com. on RLS.

Summary: Current law declares that the right to water is limited to that water that is reasonably required for the beneficial use to be served, and does not extend to the waste or unreasonable use, unreasonable method of use, or unreasonable method of diversion of water. This bill would make nonsubstantive changes to that provision.

SB 708  
**Melendez R**  Water shortage emergencies: declarations: deenergization events.

Current Text: Chaptered: 7/9/2021  html, pdf

Introduced: 2/19/2021

Last Amend: 4/19/2021


Summary: Would authorize the governing body of a public water supplier to declare a water shortage...
emergency condition without holding a public hearing in the event of a deenergization event, as defined.

**SB 719**  
**Surplus land: exempt surplus land: eligible military base land.**  
*Current Text:* Amended: 5/20/2021  
*Introduced:* 2/19/2021  
*Last Amend:* 5/20/2021  
*Status:* 7/14/2021-Failed Deadline pursuant to Rule 61(a)(11). (Last location was L. GOV. on 6/10/2021)(May be acted upon Jan 2022)  
*Summary:* Current law authorizes the adoption of a redevelopment plan for the Tustin Marine Corps Air Station Redevelopment Project, which includes specified areas comprising of the Tustin Marine Corps Air Station and land contiguous with the Tustin Marine Corps Air Station. This bill would deem certain land comprising of the Tustin Marine Corps Air Station to be exempt surplus land if specified requirements are met. In this regard, the bill would require at least 20% of the residential units that are permitted after January 1, 2022, to be restricted to persons and families of low or moderate income, and at least 15% of those units to be restricted to lower income households, as specified. The bill would require a local agency that disposes of exempt surplus land under these provisions to comply with certain requirements, including, adopting an initial finding of exemption and report certain information regarding the development of residential units on the property in a specified annual report.

**SB 776**  
**Safe drinking water and water quality.**  
*Current Text:* Amended: 7/14/2021  
*Introduced:* 2/19/2021  
*Last Amend:* 7/14/2021  
*Status:* 7/14/2021-Read second time and amended. Re-referred to Com. on APPR.  
*Summary:* The California Safe Drinking Water Act requires the State Water Resources Control Board to administer provisions relating to the regulation of drinking water to protect public health. Current law provides that the California Safe Drinking Water Act does not apply to small state water systems, except as specified. This bill would expand the application of the act to small state water systems, as specified.

**SB 780**  
**Local finance: public investment authorities.**  
*Current Text:* Amended: 6/21/2021  
*Introduced:* 2/19/2021  
*Last Amend:* 6/21/2021  
*Status:* 7/14/2021-Read second time. Ordered to third reading.  
*Summary:* Current law establishes enhanced infrastructure financing districts to finance public capital facilities or other specified projects of communitywide significance. Current law provides for the membership of the governing body of the district, referred to as the public financing authority. This bill would authorize the legislative bodies, as defined, to appoint an alternate member to the public financing authority who may serve and vote in place of a member who is absent or disqualifies themselves from participating in a meeting of the authority. If a district has more than 3 participating affected taxing entities, the bill would authorize the legislative bodies of the taxing entities to, upon agreement, appoint only one member of their respective legislative bodies, and one alternate member, in addition to the public members.

**SB 786**  
**Santa Clara Valley Water District.**  
*Current Text:* Amended: 5/11/2021  
*Introduced:* 2/19/2021  
*Last Amend:* 5/11/2021  
*Status:* 7/14/2021-Failed Deadline pursuant to Rule 61(a)(11). (Last location was L. GOV. on 5/28/2021)(May be acted upon Jan 2022)  
*Summary:* The Santa Clara Valley Water District Act authorizes the Clara Valley Water District to levy ad valorem taxes or assessments in the district to pay the general administrative costs and expenses of the district, to carry out the act’s objects or purposes, and to pay the costs and expenses of constructing or extending works within the district. The act additionally authorizes the district to levy taxes or assessments upon all property or all real property within a portion of the district for specified purposes. The act authorizes the district to issue bonds for specified purposes, and requires that the bonds be paid by revenue derived from those tax levies and assessments, except the ad valorem taxes or assessments. This bill would additionally authorize the district to use the revenues from the ad valorem taxes or assessments to pay for the bonds.

Total Measures: 79  
Total Tracking Forms: 40

PUBLIC COMMENT MAY BE SUBMITTED BY EITHER OF THESE TWO METHODS:

(1) BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, SUBMIT YOUR TELEPHONE NUMBER BY E-MAIL TO THE CLERK AT MNELSON@SDCWA.ORG AND THE CLERK WILL CALL YOU WHEN THE BOARD IS READY TO HEAR YOUR PUBLIC COMMENT (THREE MINUTES OR LESS); OR

(2) BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, E-MAIL YOUR COMMENT TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG, AND TIME ALLOWING IT MAY BE READ ALOUD AT THE PUBLIC COMMENT PERIOD (THREE-MINUTE LIMIT).

IF MODIFICATIONS OR ACCOMMODATIONS FROM INDIVIDUALS WITH DISABILITIES ARE REQUIRED, SUCH PERSONS SHOULD PROVIDE A REQUEST AT LEAST 24 HOURS IN ADVANCE OF THE MEETING BY E-MAIL TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG]

ENGINEERING AND OPERATIONS COMMITTEE

REVISED AGENDA FOR

SEPTEMBER 23, 2021

Lois Fong-Sakai, Chair  Michael Hogan
Joe Mosca, Vice Chair Keith Lewinger
Tim Smith, Vice Chair Dan McMillan
Ismahan Abdullahi Marty Miller
Gary Arant Jim Murtland
Jimmy Ayala John Simpson
Jack Bebee Kim Thorner
Eric Heidemann


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-A Directors’ comments.

I. CONSENT CALENDAR

1. Reimbursement Agreement with City of Poway for design of the new treated water connection and Poway 5 Flow Control Facility.  Jeff Shoaf
   Staff recommendation: Authorize the General Manager, or designee, to execute the design reimbursement agreement with the City of Poway for supporting the new treated water connection and Poway 5 Flow Control Facility.  (Action)

II. ACTION/DISCUSSION PRESENTATION

1. Contract with Southwest Valve & Equipment, Inc. to purchase butterfly valves.  Brent Fountain
   Staff recommendation: Authorize the General Manager, or designee, to award a contract to Southwest Valve & Equipment, Inc. to purchase two 72-inch butterfly valves in the amount of $646,868.75 for the Pipeline 5 Relining from Twin Oaks Valley Road to Crossover Pipeline Turnout project.  (Action)

III. INFORMATION

IV. CLOSED SESSION

V. ADJOURNMENT  Melinda Nelson
   Clerk of the Board

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.
September 15, 2021

Attention: Engineering and Operations Committee

Reimbursement Agreement with City of Poway for design of the new treated water connection and Poway 5 Flow Control Facility. (Action)

Staff recommendation
Authorize the General Manager, or designee, to execute the design reimbursement agreement with the City of Poway for supporting the new treated water connection and Poway 5 Flow Control Facility.

Alternative
Do not accept staff recommendation and direct staff to re-negotiate the reimbursement agreement or provide direction to staff relative to issues requiring resolution.

Fiscal Impact
This project is fully reimbursable by the City of Poway. The estimated cost for this reimbursement agreement to support the design phase is $150,000. An additional $670,000 has been budgeted for future construction and post-construction phases, including costs associated with any needed aqueduct shutdowns and will be authorized through either a future amendment or new reimbursement agreement. Funds in the amount of $820,000 are available in the approved project budget and the fiscal years 2022 and 2023 Capital Improvement Program appropriation. The rate category is Customer Service.

Executive Summary
- In September 2020, the Board approved a request by the City of Poway for a new treated water connection.
- In March 2021, the Board approved the location of a new treated water connection for Poway near the terminus of the Ramona Pipeline.
- The new connection and Poway 5 Flow Control Facility will have a capacity of 24 cubic feet per second (cfs), with various pipes and valves up to 36 inches in diameter.
- Poway will lead the project including environmental, property acquisition, public outreach, design, bidding, construction, and post-construction warranty phases.
- The Water Authority will provide support for design review, construction inspection, and shutdown coordination to ensure the new facilities conform to the Water Authority’s standards. The Water Authority will be responsible for future operating and maintenance costs for the constructed facilities.
- Poway will reimburse the Water Authority for its expenses associated with the design and construction of this project.
- This reimbursement agreement covers design phase work only. The Water Authority and Poway may amend this agreement or negotiate a new reimbursement agreement for the future construction and post-construction phases.
Background
On June 18, 2020, the City of Poway (Poway) formally requested a new treated water service connection for the operational objective to provide a secondary treated water supply to supplement its water treatment plant as required by agreement between Poway and the State Water Resources Control Board, Division of Drinking Water. The Board authorized the request at its September 24, 2020 meeting with a condition that staff coordinate with the original Ramona Pipeline member agency stakeholders, which consists of the City of San Diego, Olivenhain Municipal Water District and Ramona Municipal Water District (collectively Ramona PL Stakeholders), and obtain Board approval of the connection point location, as well as terms and conditions, following completion of a planning study.

Staff held a workshop on March 8, 2021, with the Ramona PL Stakeholders to discuss the recommendations outlined in the final planning study. While the group was supportive of the new Poway service connection and its proposed location, the group raised questions regarding potential impacts to the meter capacities already supported by the Ramona Pipeline, including water supply availability during potential emergency events such as wildfires or treatment plant outages. Staff communicated that the meter capacities would not be impacted with the addition of a new Poway service connection and demonstrated the ability to meet anticipated demands for all agencies through the year 2045 planning horizon. Contingencies are also in place to monitor and address future capacity constraints through regional improvement projects, in accordance with the Water Authority’s established planning processes and procedures.

On March 25, 2021, the Board approved the location of a new treated water connection for Poway near the terminus of the Ramona Pipeline shown in Figure 1.

At their meeting, on August 17, 2021, Poway’s City Council approved executing the reimbursement agreement shown in Attachment A.

Previous Board Actions: On September 24, 2020, the Board approved a request from the City of Poway for a new treated water connection. On March 25, 2021, the Board approved the location of the new treated water service connection near the terminus of the Ramona Pipeline.

Discussion
The new treated water connection and Poway 5 Flow Control Facility (FCF) will have a capacity of 24 cfs. The FCF will house various pipes and valves of 20 to 36 inches in diameter to regulate and meter treated water delivery to Poway.

Poway will lead the design, construction, and post-construction warranty phases. Also, Poway will take the lead in property acquisition, environmental study and permitting, public outreach effort, and bidding for construction. The Water Authority will provide support for design review, construction inspection, and shutdown coordination to ensure the proposed facilities conform to Water Authority standards. After acceptance of the constructed facilities, the Water Authority will own, operate, and maintain the new connection and Poway 5 FCF.
This reimbursement agreement covers design phase work only, for an estimated cost of $150,000. Poway will pay actual costs incurred by the Water Authority during execution of this agreement. The Water Authority and Poway may amend this agreement or negotiate a new reimbursement agreement for the future construction and post-construction phases, which has an estimated cost of $670,000. Staff will return to the Board to seek its approval of the project once the appropriate CEQA review is completed by Poway. Staff will also return to the Board near the completion of the design phase to seek its approval to execute either an amendment to this agreement or a separate reimbursement agreement for the construction, post-construction, operation, and maintenance of the facilities.

Staff recommends the Board authorize the General Manager, or designee, to execute the reimbursement agreement with the City of Poway for the design review of the new treated water connection and Poway 5 FCF. Following the approval of this recommended Board action, the City of Poway will make a deposit of $150,000 to the Water Authority and begin design of the facility.

Prepared by: Jeff Shoaf, Principal Engineer
Reviewed by: Gary Bousquet, Director of Engineering
Approved by: Dan Denham, Deputy General Manager

Attachments:
Figure 1 – Location Map
Attachment A – Reimbursement Agreement between the City of Poway and the San Diego County Water Authority for the Design of the Poway 5 Flow Control Facility
ATTACHMENT A

REIMBURSEMENT AGREEMENT BETWEEN THE CITY OF POWAY AND THE SAN DIEGO COUNTY WATER AUTHORITY FOR THE DESIGN OF THE POWAY 5 FLOW CONTROL FACILITY

This Agreement is made this _____ day of _____________ 2021, by and between the City of Poway (Poway) and the San Diego County Water Authority (Water Authority). The Water Authority and Poway (collectively Parties) in consideration of their mutual covenants, and for other valuable consideration, agree as follows:

RECITALS:

A. In September 2020, the Water Authority’s Board of Directors authorized Poway’s request for a treated water service connection study.

B. In March 2021, the Water Authority and Poway completed the Treated Water Service Connection Facility Planning Study (Planning Study). The study recommended construction of Poway 5 Flow Control Facility (POW5) that will include a new treated water turnout structure on the Ramona Pipeline (collectively Project). At the March 2021 Board of Directors meeting, the Water Authority approved the location of the Project near the Ramona Pipeline terminus.

C. The Water Authority will conduct an analysis for the need and viability of an additional future treated water supply and connection off the First Aqueduct as part of the Water Authority’s 2023 Regional Water Facilities Master Plan Update.

D. Following completion of additional planning, design, and environmental evaluations, Poway will seek its Council approval and the Water Authority will seek its Board approval of the Project once the appropriate California Environmental Quality Act (CEQA) review is completed.

E. Poway is the lead agency for compliance with CEQA. The construction of the Project is expressly contingent upon and shall not proceed until compliance with CEQA has occurred.

F. Poway will implement the Project by performing environmental evaluations, permitting, property acquisition, public outreach, design, bidding, construction, and post-construction mitigation.

G. The Water Authority will own, maintain, and operate the Project components after its acceptance of the construction and filing of the Notice of Completion for the Project.

H. Poway has requested the Water Authority assist with procurement of a designer (via proposal reviews and interviews), complete design reviews, provide construction oversight, as necessary, and post-construction support (inclusive of the two-year warranty inspection). This Agreement primarily addresses the scope of and reimbursement for the
design phase of the Project. The work for the construction phase, post-construction support, and Operation and Maintenance will be subject to a future agreement.

TERMS:

1 DELIVERY OF WATER TO POWAY 5 FLOW CONTROL FACILITY

1.1 Availability, delivery (including aqueduct shutdown), rate of flow, and cost of treated water to be sold by the Water Authority to Poway shall be as established by the Board of Directors of the Water Authority in accordance with the Water Authority’s Administrative Code, on the same basis as generally applicable to the Water Authority’s member agencies.

1.2 Flow requests and control shall be provided consistent with current practice of the Water Authority and Metropolitan Water District of Southern California (MWD) flow request guidelines. These guidelines may be amended, as required, by changes in MWD’s or Water Authority’s operating requirements or as a result of changed operating conditions with the consent of the Water Authority.

1.3 Upon completion of the Project, the Water Authority shall deliver and sell up to a maximum of 24 cubic feet per second (cfs) of treated water to Poway. Delivery of treated water by the Water Authority for Poway’s use shall be subject to availability of capacity in the Water Authority's water delivery system, as determined by the Water Authority.

2 WATER AUTHORITY OBLIGATIONS

2.1 Furnish a copy of the Water Authority’s General Conditions and Standard Specifications, Standard Drawings and Standard Details, CAD base drawing with title block and Engineering Standard Documents (ESDs) to be used in preparation of the design and construction plans and detail drawings and specifications.

2.2 Participate in design proposal review, consultant selection, and project team meetings. Provide deliverable reviews during design. Deliverable reviews shall be within a reasonable timeframe as established by the Parties or as defined herein.

2.3 Assign a Project Manager to be Poway’s single point of contact during the Project.

2.4 Review and confirm design of the Project is in accordance with the Water Authority’s guidelines and standards and the requirements of the Planning Study.

2.5 Provide to Poway with written comments at preliminary, midpoint and final design phases on the design documents including reports, calculations, drawings, specifications, cost estimates and schedule of construction.

2.6 During the design phase, Water Authority will submit review comments and/or concurrence within 20 working days of receiving documents noted in Section 2.5. If Water Authority does not respond within the time stated, it will be understood by the
ATTACHMENT A

Parties that no comment is forthcoming, and Poway may proceed, unless notified by the Water Authority that additional time is required. Water Authority shall not unreasonably delay or withhold approval.

2.7 Provide 10 calendar days’ notice of meetings and other project-related occurrences.

2.8 Water Authority will coordinate with Poway prior to the issuance of any press releases or public outreach related to the Project.

3 CITY OF POWAY OBLIGATIONS

3.1 Provide all labor and services necessary to complete environmental evaluations, CEQA documents, property acquisition, public outreach, design, bidding, and award of a construction contract.

3.2 Assign a Project Manager to the Project to be the Water Authority’s single point of contact during the Project.

3.3 Provide 10 calendar days’ notice of meetings and other project-related occurrences.

3.4 Provide the site(s) of the Project near the Ramona Pipeline terminus as shown in the Planning Study.

3.5 Prepare for the Water Authority’s approval the legal description and plats for the fee parcel referenced in Section 3.4. Record and install monuments delineating the fee parcel and file a Record of Survey with the County of San Diego. These services will be performed by a land surveyor licensed in the State of California.

3.6 Perform a Phase I Environmental Site Assessment to verify that the site is free of hazardous material and provide results to the Water Authority. If required and agreed to in writing by the Parties, perform Phase II testing.

3.7 Design and construct POW5 and the turnout structure to the Water Authority’s standards with a capacity to deliver up to 24 cfs of treated water. Provide 1-year advance notice to the Water Authority prior to performing work involving shutdown of the Water Authority’s pipelines and facilities.

3.8 Procure, or provide, services for design, a public bid, preparation of bid addendum and of the Project.

3.9 Provide design documents of the Project, referenced in Section 2.5, to the Water Authority. The design documents shall be stamped and signed by a professional engineer(s) registered in the State of California. Poway shall obtain the Water Authority’s Director of Engineering’s approval of and signature on the construction plans of the Project before advertising for bid.

3.10 Complete the environmental evaluations and CEQA documents. The design shall comply with the CEQA requirements.
3.11 Obtain all permits, notices, and approvals from the City of Poway required for construction and access to the Project site before the completion of the final design. Poway, as lead agency, will prepare revisions to the CEQA documents if required by the final project design and construction.

3.12 Provide to the Water Authority, before filing the Notice of Completion for the Project with the County of San Diego, the fee parcel for the operation, access, and maintenance of the Project as generally shown in the Planning Study.

3.13 Provide to the Water Authority a policy of title insurance insuring that the fee parcel referenced in Section 3.5 is free of any liens and encumbrances.

3.14 Implement all remediation of hazardous materials identified in the Phase I and/or Phase II Environmental Site Assessment.

3.15 Poway’s obligations under this Agreement will be performed at Poway’s expense.

4 CALCULATION OF AND PAYMENT OF COSTS

4.1 Poway shall pay 100 percent of all actual costs incurred by the Water Authority for administration, review, and other Water Authority actions under this Agreement relating to the design of the Project.

4.2 Poway shall deposit with the Water Authority, within 15 calendar days of execution of this Agreement by both Parties, $150,000 as the estimated amount of the Water Authority’s costs to be paid by Poway.

4.3 Poway will pay all design, construction, construction management, right of way, public affairs, environmental and mitigation, post-construction warranty, pipeline shutdowns, and other related costs for the Project.

4.4 If Poway decides to cease work on the Project at any time during design and construction, it will reimburse the Water Authority for all costs incurred by the Water Authority up to the date that Poway provides notice to the Water Authority of its intention to cease work.

4.5 If the construction of the Project is delayed, the final design may need to be updated to meet current codes and requirements. Poway will modify the final design and pay the costs incurred by the Water Authority for additional review. Time is of the essence and the Parties will endeavor to work continuously on the Project from date of contract execution until the Project is completed.

4.6 The Water Authority will provide a project cost accounting to Poway following each phase (design, construction, and post-construction) of the Project.

4.7 The Parties will reconcile the costs for each cost accounting. If the actual costs exceed the estimated cost, a mutually agreed upon amendment will be processed in accordance with the Water Authority policies. If the actual costs are less than the deposits, the
excess amount will be refunded to Poway within 45 calendar days of the Water Authority’s accounting.

4.8 Any amounts not paid within 45 calendar days of receipt of invoice for work performed shall be considered delinquent, and the Water Authority, at its sole discretion, may stop work.

4.9 Water Authority will retain detailed records from which costs are calculated for a period of three years from the date of the final warranty inspection for the Project and will be available for verification by Poway. If Poway determines an audit is necessary, it will be completed at Poway’s expense.

4.10 Water Authority will notify Poway when the costs incurred by the Water Authority reach 80 percent of the Project Deposit amount shown in Section 4.2 and provide an estimate for the cost to complete based on the progress made to date. If an additional deposit is required, this Agreement will be amended to reflect the additional costs. Poway shall deposit any additional funds with the Water Authority, within 15 calendar days of execution of the amendment by both Parties.

5  FACILITIES OWNERSHIP, OPERATION, MAINTENANCE AND ACCESS RIGHT OF WAY

5.1 In accordance with current Water Authority Administration Code, all operation and maintenance costs of the Project shall be borne by the Water Authority. Poway acknowledges the right of the Water Authority’s Board to revise the Administration Code to recover future operation and maintenance costs.

5.2 The Project will be located on property near the Ramona Pipeline terminus as shown in the Planning Study. This property is currently owned by Poway and is accessible from adjacent public streets. Poway shall coordinate with the Water Authority the final property boundaries for the Project and grant to the Water Authority, in fee, said parcel unless otherwise agreed to by the Water Authority.

5.3 The Water Authority will own, maintain, operate, and otherwise be responsible for all components of the Project, including inlet and outlet piping within the fee parcel referenced in Section 3.5, and buried cathodic protection isolation joint assemblies and test stations to be installed at the fee property limits on the inlet and outlet piping. The isolation joints will delineate the change in ownership of the piping. On the surface, the change of ownership will be delineated with a concrete pad (property/survey marker), and fencing.

5.4 Poway will own, maintain and operate all components of the piping outside of the Water Authority facilities (POW5, the turnout structure, and the lateral piping between the turnout structure and POW5).

5.5 Shutdowns of the Water Authority’s pipelines for the Project have not been determined at this time. The Water Authority assumes no shutdown required during the design phase. The shutdown for construction will be solely for this Project. However, if other maintenance work is scheduled for the same shutdown on the Ramona Pipeline or the
First Aqueduct, then the costs of the shutdown will be proportionately shared. The Water Authority will do its best to schedule any shutdown required for the 2-year post-construction warranty inspection in conjunction with other maintenance activities to minimize the cost incurred by Poway.

5.6 Landscaping required by the Project and outside of the fee parcel for the Project shall be installed, owned and maintained by Poway. The landscaping shall not impact the integrity, security, operation, and maintenance of the Project. Neither Poway nor the Water Authority shall install or maintain landscape inside the fee parcel for the Project.

6 DISPUTE RESOLUTION

6.1 If a dispute arises out of or relates to this Agreement, and if the dispute cannot be settled through normal negotiations, the Parties agree to try in good faith to settle the dispute by promptly choosing a mutually agreed-upon mediator, and to proceed with such mediation under the Construction Industry Mediation Rules of the American Arbitration Association before the Parties may have recourse in a court of law.

6.2 The expenses of mediation witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the mediation, including required traveling and other expenses of the mediator, and the cost of any proofs or expert advice produced at the direct request of the mediator, shall be borne equally by the Parties, unless otherwise agreed.

6.3 Any agreements resulting from mediation shall be documented in writing. All mediation and documentation and agreements shall be “non-binding” and protected as confidential to the maximum extent under the law unless otherwise explicitly provided for in writing signed by the parties. Mediators shall not be subject to any subpoena or liability and their actions shall not be subject to discovery.

7 INDEMNIFICATION. Poway and the Water Authority agree to mutually indemnify, defend at their own expense, including attorneys’ fees, and hold each other harmless from and against all claims, costs, demands, losses, and liability of any nature whatsoever, including but not limited to liability for bodily injury, sickness, disease or death, property damage (including loss of use), or violation of the law, caused by or arising out of any error, omission, negligent act, or willful misconduct of that party, its officers, directors, employees, agents, volunteers, or any other person acting pursuant to its control in performing under this Agreement.

8 LAWS AND VENUE. This Agreement will be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of this Agreement, the action shall be brought in a state or federal court in San Diego County, California.

9 INTEGRATION AND AMENDMENT. This Agreement represents the entire understanding of the Water Authority and Poway as to those matters contained herein, and supersedes all prior understandings or agreements relating to the subject matter of this Agreement. No prior oral or written understanding or agreement shall be of any force or effect with respect to those
ATTACHMENT A

matters covered by this Agreement. This Agreement may be modified only by a subsequent
written amendment executed by both Parties.

10 SUCCESSORS OR ASSIGNS. This Agreement and any portion thereof shall not be assigned
or transferred, nor shall any of the duties be delegated, without the express written consent of
both Parties, which shall not be unreasonably withheld or delayed. Any attempt to assign or
delegate this Agreement without the express written consent of both Parties shall be void and
of no force or effect.

11 NOTICE. Any notice, payment, credit, or instrument required or permitted to be given
hereunder will be deemed received upon personal delivery, confirmation of receipt of an
electronic delivery, or 24 hours after deposit in any United States mail depository, first-class
postage prepaid, and addressed to the party for whom intended as follows:

If to the WATER AUTHORITY: San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123
Attn: Director of Engineering

If to POWAY: City of Poway
13325 Civic Center Drive
Poway, CA 92064
Attn: ___________________

12 SEVERABILITY. The partial or total invalidity of one or more parts of this Agreement will
not affect the intent or validity of the remainder of this Agreement.

13 SIGNATURES. The individuals executing this Agreement represent and warrant that they
have the legal capacity and authority to do so on behalf of their respective legal entities. This
Agreement may be executed in any number of counterparts and by the parties hereto in separate
counterparts, each of which shall be deemed to be an original when executed, and all of which
taken together shall constitute one and the same instrument.

14 NO WAIVER. No waiver by any Party of any default in performance on the part of any other
Party, or of any breach or series of breaches of the terms, covenants, or conditions of this
Agreement, will constitute a waiver of any subsequent breach or a waiver of any term,
covenant, or condition.
ATTACHMENT A

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date written above.

San Diego County Water Authority

By: ______________________________
    Sandra L. Kerl
    General Manager

City of Poway

By: ______________________________
    Chris Hazeltine
    City Manager

Approved as to form:

By: ______________________________
    Anna Brathwaite
    Deputy General Counsel

Approved as to form and legality:

By: ______________________________
    Alan Fenstermacher
    City Attorney
September 15, 2021

Attention: Engineering and Operations Committee

Contract with Southwest Valve & Equipment, Inc. to purchase butterfly valves (Action)

Staff recommendation
Authorize the General Manager, or designee, to award a contract to Southwest Valve & Equipment, Inc. to purchase two 72-inch butterfly valves in the amount of $646,868.75 for the Pipeline 5 Relining from Twin Oaks Valley Road to Crossover Pipeline Turnout project.

Alternative
Do not award this contract and direct staff to solicit new bids. This will result in delays and increased costs for the Pipeline 5 Relining from Twin Oaks Valley Road to Crossover Pipeline Turnout project.

Fiscal Impact
Funds in the amount of $646,868.75 are available in the approved project budget and the fiscal years 2022 and 2023 Capital Improvement Program appropriation. The rate category for these valve purchases is transportation.

Executive Summary
- Pre-procuring valves reduces construction schedule and risk, while increasing competition between valve suppliers.
- Six butterfly valve bids were received on August 24, 2021, ranging from $560,895 to $1,110,310. B&K Valves & Equipment, Inc. submitted the apparent low bid.
- In consultation with General Counsel, staff deemed B&K Valves & Equipment, Inc.’s bid non-responsive.
- Southwest Valve & Equipment, Inc. submitted a bid protest asserting B&K’s bid was non-responsive.
- Staff recommends awarding a contract to Southwest Valve & Equipment, Inc., the lowest responsive, and responsible bidder in the amount of $646,868.75 to purchase two 72-inch butterfly valves.
- The estimated duration to manufacturer and deliver the valves is 12 to 15 months.

Background
Butterfly valves are installed throughout the Water Authority’s aqueduct system to isolate facilities for operations and maintenance activities. Manufacturers typically design and fabricate these valves when they are purchased and do not keep them stocked in a warehouse resulting in a 12 to 15 month delivery time.
The Pipeline 5 Relining Twin Oaks Valley Road to Crossover Pipeline Turnout project will rehabilitate approximately 5,000 feet of 96-inch prestressed concrete cylinder pipe. Pipeline 5 will be shut down to complete this work during the winter of 2022/2023. This project includes replacing two 72-inch valves that are used to isolate Pipeline 5 near the Twin Oaks Valley Water Treatment Plant. The existing valves were installed in 1982 when Pipeline 5 was constructed in this area. These valves are beyond their service life and were discovered to be leaking during a previous project, necessitating their replacement. Pre-purchasing the valves and replacing them during the relining project will minimize shutdown impacts to member agencies by taking advantage of an existing planned shutdown to perform the work and reducing the risk of late valve deliveries.

**Discussion**

Staff advertised the valve procurement Notice Inviting Bids on July 28, 2021. Six bids were received on August 24, 2021, ranging from $560,895 to $1,110,310. The cost estimate range was $700,000 to $900,000. A bid summary is included in Attachment 1. B&K Valves & Equipment, Inc. (B&K) submitted the apparent low bid. Staff reviewed the two apparent low bids for conformance with the bid documents.

The Water Authority’s Notice Inviting Bids included a product substitution process for bidders to propose products by manufacturers other than those specified. B&K’s bid included an incomplete product substitution. After reviewing, staff determined that B&K’s proposed substitute manufacturer does not meet the requirements of the bid documents. Concurrent with staff’s bid review, the second low bidder, Southwest Valve & Equipment, Inc. (Southwest), submitted a bid protest asserting B&K’s bid was non-responsive. Following staff and General Counsel’s review of the bid documents and the Water Authority’s Administrative Code, staff deemed B&K’s bid non-responsive. After reviewing Southwest’s second low bid, staff determined Southwest to be the lowest responsive and responsible bidder.

Due to limited subcontracting opportunities for this type of service, SCOOP outreach was not required for the valve procurement. Staff recommends the Board authorize the General Manager, or designee, to award a contract to Southwest Valve & Equipment, Inc. in the amount of $646,868.75 to purchase two 72-inch butterfly valves for the Pipeline 5 Relining from Twin Oaks Valley Road to Crossover Pipeline Turnout project.

Prepared by: Colin Kemper, Senior Engineer
Brent Fountain, Principal Engineer
Reviewed by: Gary W. Bousquet, Director of Engineering
Approved by: Dan Denham, Deputy General Manager

Attachments:
Attachment 1 – Bid Summary
# BID SUMMARY

STAINLESS STEEL METAL-SEATED TRIPLE-OFFSET VALVES  
NIB 21-02

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<td>COST ESTIMATE</td>
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<td>1.</td>
<td>B&amp;K Valves &amp; Equipment, Inc.*</td>
<td>$560,894.95</td>
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<td>2.</td>
<td>Southwest Valve &amp; Equipment, Inc</td>
<td>$646,868.75</td>
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<td>3.</td>
<td>KPR</td>
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<td>4.</td>
<td>Cascade Consultants LLC</td>
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<td>5.</td>
<td>Adams Valves, Inc.</td>
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<td>6.</td>
<td>CFM-San Diego</td>
<td>$1,110,310.00</td>
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* Non-Responsive Bid

PUBLIC COMMENT MAY BE SUBMITTED BY EITHER OF THESE TWO METHODS:

(1) BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, SUBMIT YOUR TELEPHONE NUMBER BY E-MAIL TO THE CLERK AT MNELSON@SDCWA.ORG AND THE CLERK WILL CALL YOU WHEN THE BOARD IS READY TO HEAR YOUR PUBLIC COMMENT (THREE MINUTES OR LESS); OR

(2) BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, E-MAIL YOUR COMMENT TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG, AND TIME ALLOWING IT MAY BE READ ALOUD AT THE PUBLIC COMMENT PERIOD (THREE-MINUTE LIMIT).

IF MODIFICATIONS OR ACCOMMODATIONS FROM INDIVIDUALS WITH DISABILITIES ARE REQUIRED, SUCH PERSONS SHOULD PROVIDE A REQUEST AT LEAST 24 HOURS IN ADVANCE OF THE MEETING BY E-MAIL TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG]

WATER PLANNING AND ENVIRONMENTAL COMMITTEE

REVISED AGENDA FOR

SEPTEMBER 23, 2021

Jose Preciado, Chair
Keith Lewinger, Vice Chair
Elsa Saxod, Vice Chair
Jack Bebee
Brian Boyle
Craig Elitharp
Lois Fong-Sakai
Tom Kennedy

Valentine Macedo Jr.
Dan McMillan
Amy Reeh
Mona Rios
Joel Scalzitti
Nick Serrano
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

II. ACTION/DISCUSSION/PRESENTATION

1. Drought Presentation. (Presentation) Alexi Schnell
2. Regional Stormwater Capture Pre-Planning and Feasibility Study Update. (Presentation) Jeremy Crutchfield
3. Update on Microplastics Regulation Development. (Presentation) Leslie Dobalian

III. INFORMATION

1. Water Resources Report. Jeff Stephenson

IV. CLOSED SESSION

V. ADJOURNMENT

Melinda Nelson
Clerk of the Board

NOTE: This meeting is called as a Water Planning and Environmental 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.
September 15, 2021

Attention: Water Planning and Environmental Committee

Drought Presentation (Presentation)

Purpose
To provide a presentation on drought conditions and related actions.

Discussion
Drought conditions continue to worsen across the West and change daily. This presentation will provide the latest information that may include, but not be limited to, water supply conditions, drought-related actions taken by the Metropolitan Water District of Southern California, drought conditions on the Colorado River, drought outreach activities, or advocacy efforts related to drought.

Prepared by: Jeff Stephenson, Water Resources Manager
Reviewed by: Kelley Gage, Director of Water Resources
Approved by: Dan Denham, Deputy General Manager
Executive Summary

- Projects to capture and reuse stormwater have become an emerging area of focus in the region and state.
- Stormwater reuse can assist agencies with compliance of their Municipal Separate Storm Sewer System (MS4) discharge permits and can offer multiple benefits such as habitat restoration, water supply, groundwater recharge, and groundwater quality improvements.
- The Water Authority is open to partnering with other agencies on stormwater projects that provide multiple benefits which include a secondary benefit of a cost-effective water supply.
- A collaborative, integrated regional approach to stormwater capture can help to realize the full range of benefits of a stormwater capture project.

Discussion

Projects to capture and reuse stormwater have become an emerging area of focus in the region and state. These projects can promote water quality improvements by diverting, treating, and using stormwater flows to reduce pollutant loading into receiving waters, such as the ocean. In addition, stormwater reuse can assist agencies with compliance of their MS4 discharge permits, flood control, habitat restoration, water supply, groundwater recharge, and groundwater quality improvements. With water supply as a potential secondary benefit of stormwater capture projects, it is identified in the Governor’s 2020 Water Resilience Portfolio as one of the eight “proposals” that can support water supply diversification.

In 2021, the California Stormwater Quality Association (CASQA) conducted a poll to ascertain what its members (regulatory agency staff, local agency staff, and consultants) felt were the top drivers for stormwater capture projects. The poll indicated that the primary drivers for stormwater capture projects are permit compliance/water quality (63%), flood control/drainage (18%), groundwater recharge (9%), water supply (8%), and other (2%). Due to their high cost, stormwater capture projects are most efficient when they can meet multiple objectives (stormwater compliance, flooding reduction, and water supply, for example). Of these benefits, water supply is the primary benefit that applies to the Water Authority. Other agencies focus on permit compliance, flood control, and groundwater recharge.

Though the Water Authority is not directly responsible for the reduction of stormwater or removal of stormwater pollutants from municipal separate storm sewer systems, the Water Authority is supportive of creative local stormwater capture and use opportunities that can both (1) support the region’s efforts to improve water quality, and (2) as a secondary benefit have the potential to
provide a high-quality water supply at a cost in line with that of other water supplies within the region. As such, the Water Authority is open to partnering with other agencies on stormwater projects that provide multiple benefits which include a secondary benefit of a cost-effective water supply.

For decades, the San Diego region has already effectively captured “clean” stormwater in its surface reservoirs for local water supply. Capturing the urban runoff is more complex, due to additional contaminants and pollutants present in those flows. In preparation for the upcoming 2023 Master Plan, the Water Authority looked further into stormwater capture and initiated a high-level study to evaluate the feasibility and costs of stormwater capture in the region through the lens of water supply diversification.

Key takeaways from the study include:

- Water Authority has sufficient supply through planning horizon as demonstrated in its 2020 Urban Water Management Plan
- San Diego region already captures a significant portion of storm runoff in its 24 surface water reservoirs
- Urban stormwater capture proves challenging due to the region’s highly variable hydrology, limited rainfall, lack of groundwater basins, unique topography, and existing infrastructure
- Potential stormwater capture volumes estimated between 480 – 3,710 acre-feet (AF)/year at a cost of $48,000 - $145,000/AF in San Diego County
- Stormwater capture is economically infeasible when considered solely for water supply diversification

As these stormwater capture opportunities are much more costly by an order of magnitude than the costs of other drinking water supplies, such as imported water, indirect potable reuse, and desalination, they are therefore unlikely to be constructed to supply water as an isolated project benefit. However, they do have the potential to offer multiple benefits, such as groundwater recharge and environmental regulatory compliance, by helping to achieve the goals of improved water quality. To truly understand the costs of these stormwater capture projects, they would need to be reviewed in comparison to the cost of MS4 compliance on the part of local agencies. A collaborative, integrated regional approach to stormwater capture can help to realize the full range of benefits of a stormwater capture project.

Staff’s presentation will review the study findings along with two project concepts that were developed and analyzed in more detail.

Prepared by: Jeremy Crutchfield, Water Resources Manager
Reviewed by: Kelley Gage, Director of Water Resources
Approved by: Dan Denham, Deputy General Manager

Attachment 1: Urban Stormwater Capture for Water Supply Feasibility and Pre-Planning Assessment
FINAL

URBAN STORMWATER CAPTURE FOR WATER SUPPLY

Feasibility and Pre-Planning Assessment

B&V PROJECT NO. 408688

PREPARED FOR

San Diego County Water Authority

23 AUGUST 2021
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## ABBREVIATIONS

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<td>ASR</td>
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<tr>
<td>MS4</td>
<td>Municipal Separate Storm Sewer System</td>
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<td>National Pollutant Discharge Elimination System</td>
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<td>National Resource Conservation Service</td>
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NSF     National Sanitation Foundation
O&M     Operations and Maintenance
Ocean   Pacific Ocean
PCB     Polychlorinated biphenyl
RCS     Regional Conveyance System
ROWD    Report of Waste Discharge
RWQCB   Regional Water Quality Control Board
SDWA    Safe Drinking Water Act
SGMA    Sustainable Groundwater Management Act
SWRP    2017 San Diego Region Functionally Equivalent Storm Water Resources Plan
SWRCB   State Water Resources Control Board
TDS     Total Dissolved Solids
TSS     Total Suspended Solids
UIC     Underground Injection Control
USDW    Underground Sources of Drinking Water
USGS    United States Geological Survey
Water Authority    San Diego County Water Authority
WIFIA   Water Infrastructure Finance and Innovation Act
WRFP    Water Recycling Funding Program
Executive Summary

The Urban Stormwater Capture for Water Supply Feasibility and Pre-Planning Assessment (Study) is intended to help advance further review of potential urban stormwater capture project opportunities and inform future planning efforts within the San Diego region. This Study builds upon the 2018 County of San Diego Stormwater Capture and Use Feasibility Study (County Stormwater Capture Study), which provides guidance on stormwater capture alternatives and identified 2,200 to 22,000 acre-feet per year of potential additional stormwater capture opportunities on public parcels and rights of way within the region, beyond what is already captured in surface water reservoirs. The County Stormwater Capture Study reviewed stormwater capture alternatives such as direct discharge to groundwater, onsite irrigation reuse, and controlled discharge to wastewater treatment plants for indirect potable reuse or recycled water use. This Study considered these alternatives as well as others (such as stormwater capture and reuse from a river or channel, and reservoir supplementation), and aimed to characterize the costs and benefits of two key stormwater capture and use scenarios to better understand the feasibility of these options from a water supply perspective.

Though the Water Authority is not directly responsible for the reduction of stormwater or removal of stormwater pollutants from municipal separate storm sewer systems (MS4), the Water Authority is supportive of creative local stormwater capture and use opportunities that can both (1) support the region’s efforts to improve water quality, and (2) as a secondary benefit have the potential to provide a high-quality water supply at a cost in line with that of other water supplies within the region.

The following tasks were completed during this study:

1. Stakeholder Coordination
2. Data Collection and Review
3. Stormwater Capture Alternatives Review
4. High-Level Feasibility Assessment of Stormwater Capture Scenarios
5. Financial Evaluation of Stormwater Capture Scenarios

The consultant and Water Authority team (team) began with a large suite of stormwater capture alternatives, even far-fetched ones (such as a freshwater reservoir storage in the ocean to capture river discharge), and reduced the list to those feasible alternatives which had the highest capture volumes. The following stormwater capture and use scenarios were selected for further review:

- **Model #1**: Stormwater capture from a major river within the San Diego region, storage, pretreatment, and conveyance to reservoir (Model #1a) or raw water pipeline (Model #1b) for treatment and potable use.
- **Model #2**: Stormwater capture from a major river within the San Diego region, storage, treatment, and infiltration (Model #2a) or injection (Model #2b) into groundwater for later extraction and use.

These stormwater capture and use models were reviewed at a high level in order to assess the capture volume, benefits, challenges, regulatory considerations, pretreatment and treatment
requirements, general feasibility, annual diversion volume, and annualized cost per acre-ft. Each stormwater capture scenario was contextualized to the San Diego region by selecting a local watershed, approximate location, and capture approach to consider as representative models for stormwater capture feasibility, but these scenarios could be applied at various locations within the region.

Rather than targeting large storms that occur infrequently and are unpredictable, the models capture smaller storms that occur on an annual basis. Targeting a more constant rate of discharge offers greater water supply reliability, resulting in a larger volume of stormwater diverted each year. Model optimization efforts revealed that onsite storage could be minimized, and the capture volume maximized, with a rate of outflow that matches the rate of inflow.

The team calculated and optimized the streamflow diversion from the channel or river and developed planning-level cost ranges for each model. The annual diversion volume and cost per acre-ft ranges for each alternative are summarized in Table 1-1 below. Key assumptions for development of these values are outlined in Chapters 4.0 and 5.0.

Table 1-1: Summary of Annual Diversion Volumes and Planning-Level Costs for Model Scenarios

<table>
<thead>
<tr>
<th>Model #</th>
<th>1a</th>
<th>1b</th>
<th>2a</th>
<th>2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Description</td>
<td>Discharge to Reservoir</td>
<td>Discharge to Raw Water Pipeline</td>
<td>Infiltration to Drinking Water Aquifer</td>
<td>Injection to Drinking Water Aquifer</td>
</tr>
<tr>
<td>Parcel Size</td>
<td>1 – 3 acres</td>
<td>1 – 3 acres</td>
<td>3 – 12 acres</td>
<td>&lt; 1 – 25 acres</td>
</tr>
<tr>
<td>Annual Diversion Volume (acre-ft per year)</td>
<td>600–3,340 acre-ft</td>
<td>600–3,340 acre-ft</td>
<td>620–3,710 acre-ft</td>
<td>600–3,340 acre-ft</td>
</tr>
<tr>
<td>Annual Project Yield (1) (acre-ft per year)</td>
<td>600–3,340 acre-ft</td>
<td>600–3,340 acre-ft</td>
<td>500–2,970 acre-ft</td>
<td>480–2,670 acre-ft</td>
</tr>
<tr>
<td>Project Capital Cost (in millions)</td>
<td>$38.9–$95.8</td>
<td>$35.9–$86.3</td>
<td>$44.7–$135.0</td>
<td>$44.3–$128.4</td>
</tr>
<tr>
<td>Annual Operations, Maintenance, and Energy Costs (in millions)</td>
<td>$1.1–$3.8</td>
<td>$1.1–$3.7</td>
<td>$1.1–$3.9</td>
<td>$1.5–$5.3</td>
</tr>
<tr>
<td>Cost Per Acre-Ft (2)</td>
<td>$48,000–$96,000</td>
<td>$44,000–$90,000</td>
<td>$68,000–$127,000</td>
<td>$81,000–$145,000</td>
</tr>
</tbody>
</table>

(1) For Models 2a and 2b, it is assumed that 80% of the volume injected could be extracted for beneficial use.
(2) Assumes an annual interest rate of 3.5%, and a project lifespan of 25 years.

These stormwater capture opportunities are much more costly by an order of magnitude than the costs of imported water, indirect potable reuse, and desalination, so they are unlikely to be constructed to supply water as an isolated project benefit. However, they do have the potential to offer multiple benefits, such as groundwater recharge and environmental regulatory compliance (MS4), by helping to achieve the goals of improved water quality. To truly understand the costs of these stormwater capture models, they would need to be reviewed in comparison to the cost of MS4 compliance on the part of local agencies. A collaborative, integrated regional approach to stormwater capture can help to realize the full benefits of a stormwater capture project.
1.0 Introduction

1.1 Purpose of This Study

The capture of urban stormwater for water supply augmentation is an emerging area of focus for local retail water agencies in San Diego County and in the State of California as drought conditions persist and the need for water supply resilience increases. At the State level, there is a $5.1 billion package proposed by the governor to help implement the State's 2020 Water Resilience Portfolio. This regional stormwater capture feasibility study provides a high-level screening and evaluation of the feasibility of capture, storage, and use of stormwater as a water supply within the San Diego region based on current conditions. As drought conditions, water supply costs, treatment technologies, and regulatory requirements change and make stormwater capture and use more cost-effective, the feasibility of stormwater capture and use may be revisited.

Urban stormwater travels over streets, sidewalks, and other impervious surfaces that are laden with pollutants, such as hydrocarbons, sediment, bacteria, nitrogen, heavy metals, and phosphorous. Typically, these stormwater flows are directed to the storm drainage system, then discharged to waterbodies (such as creeks, lakes, and ultimately the ocean) without pretreatment. Over time, this leads to impairment of local water bodies, such that they can no longer provide their designated beneficial uses like fishing, swimming, and irrigation.

The Clean Water Act (CWA), enforced through the Environmental Protection Agency (EPA) and the Regional Water Quality Control Boards (RWQCBs), requires that local agencies that own and maintain a Municipal Separate Storm Sewer System (MS4) take action to reduce the level of pollutants that impair local waterbodies through National Pollutant Discharge Elimination System (NPDES) permits that allow discharge of clean, unpolluted stormwater to waterbodies.

Stormwater capture and reuse projects promote water quality improvement while providing secondary benefits, like water supply diversity for consideration by local agencies. Diverting, treating, and using stormwater flows reduces the pollutant loading from urban stormwater to impaired waters, such as the Ocean. In addition to water quality improvement and water supply development, stormwater reuse can offer other multiple benefits, including compliance with MS4 NPDES permits, flood control, habitat restoration, groundwater recharge, and groundwater quality improvement. These benefits can be realized through regional partnerships on stormwater capture and reuse projects and programs.

This study builds upon the results of the County Stormwater Capture Study by examining two key stormwater capture and use scenarios and characterizing their costs per acre-ft, potential constraints, and anticipated benefits to better understand the feasibility of these options from a water supply perspective.

This study examines stormwater capture opportunities located downstream from existing reservoirs in or near urban areas to assess the feasibility of capturing and using this additional water. The Water Authority is not directly responsible for the removal of stormwater pollutants. However it is interested in further exploring opportunities that can both support the San Diego region’s goal of reducing the impacts of urbanized runoff to receiving waters while identifying potentially feasible local water supply projects for the region and assist in obtaining funding.
2.0 Background

2.1 Regional Setting

Situated at the furthest southern reaches of California, the populous coastal San Diego region covers approximately 4,500 square miles of highly variable terrain. The region’s boundaries from north to south extend from the Orange and Riverside County lines to the border municipalities of Tijuana and Tecate. From west to east, San Diego extends from the Pacific Ocean to Imperial County. The cities in the west are densely populated, the central cities are comprised of hillsides and farmland, and in the east lies a mountainous desert. The San Diego region is characterized by a variation in ocean proximity, mountains, hills, and canyons. This variation is the reason for the County’s range of microclimates, a critical component to characterize and understand the regional hydrology.

On average, the semi-arid San Diego area receives just over 10-inches of rain annually as measured at the Lindbergh Field weather station situated on the coast – while inland mountain areas can receive more than three times this amount of rainfall. San Diego’s semiarid climate translates to higher evapotranspiration than precipitation rates interannually. The inland cities demonstrate higher evapotranspiration rates due to higher atmospheric pressures and greater distance from the coastal north pacific air masses. Most of San Diego’s reservoirs are in the east, where these evapotranspiration rates are higher.

Capturing and using additional stormwater that flows to the ocean, beyond that which is already captured, is challenging in San Diego County due to the region’s highly variable hydrology, unique topography, groundwater basin limitations, density of urban development, and existing infrastructure. In January 2018, the Conservation and Local Resources Committee of the Metropolitan Water District found that only 3.2% of the precipitation that falls on the San Juan Creek, Santa Margarita River, San Luis Rey, and San Diego River Watersheds makes it way to the major creeks downstream, based on historical average daily USGS streamflow data and historical annual rainfall records. This would indicate the region already captures or uses a significant portion of rainfall in these watersheds in its local surface reservoirs and other local stormwater use initiatives.

Most of the water captured and stored in San Diego County is stored in its network of reservoirs, which are generally located in the eastern part of the region, away from the urban areas. Stormwater is also captured, but generally not stored, in the urban areas through networks of storm drain systems and stormwater treatment controls that have been installed as part of new and redevelopment projects to comply with the MS4 permit.

The Water Authority does not hold groundwater rights, but works in collaboration with its member agencies (see Figure 2-1 for a map of the Water Authority’s member agencies) to support local groundwater recovery projects.
Figure 2-1: Map of the Water Authority Member Agencies and Pipelines
Local water agencies are in the process of identifying potential projects to increase groundwater production by treating brackish (saline) groundwater to potable standards.¹ Four of the region’s groundwater basins are subject to the 2014 California Sustainable Groundwater Management Act (SGMA), which requires the basins to be sustainably managed by local public agencies. These basins include Borrego Valley, San Diego River Valley, San Luis Rey Valley, and San Pasqual Valley. Use of groundwater as a water supply and as storage for stormwater capture is challenging in San Diego due to the limited number of groundwater basins, difficulties and cost of treating both injected and extracted water, and sparse rainfall in the urban areas of the region. In addition, as soil becomes saturated, the infiltration rate decreases, which reduces the amount of water that can infiltrate into the ground during a rainfall.

Additional information about the San Diego Regional Setting is provided in Section 1.2 of the “San Diego Stormwater Capture and Use Feasibility Study – Quantification Analysis and Results” Technical Memo, prepared by ESA Associates for the County Stormwater Capture Study, dated September 20, 2018.

### 2.2 Water Authority Water Supply Portfolio

The Water Authority is a water wholesaler that works with its 24 member agencies [https://www.sdcwa.org/member-agencies/our-members] to supply water to 3.3 million people across the San Diego region. The region uses a diverse number of drinking water sources, as shown in Figure 2-2 to offer greater system reliability. Sources include local surface water, groundwater, recycled water, and desalinated water.

![San Diego Region Water Supply Diversification in 2020](https://www.sdcwa.org/your-water)

**Figure 2-2: San Diego Region Water Supply Diversification in 2020²**

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¹ Source: [https://www.sdcwa.org/your-water/local-water-supplies/groundwater](https://www.sdcwa.org/your-water/local-water-supplies/groundwater)
² Source: [https://www.sdcwa.org/your-water](https://www.sdcwa.org/your-water)
2.3 Region’s Reservoirs

Surface water, currently captured and stored upstream of dense urban areas, is a vital part of the Water Authority’s portfolio. Reservoirs in San Diego capture a large portion of the stormwater runoff within creeks that would otherwise be directed to urban areas. Stormwater within reservoirs upstream of urban areas does not intersect with the urban landscape; lower flows to the urban landscape results in lower mobilization of pollutants to local creeks, rivers, and the Pacific Ocean. There are 24 reservoirs that serve San Diego County. A summary of the storage capacity of the region’s reservoirs is provided in Table 2-1, and a map of these reservoirs is provided in Figure 2-3.

Reservoirs that are most feasible for stormwater storage meet three criteria: (1) have available storage capacity, (2) are located further west, closer to the urbanized areas of San Diego County, to minimize conveyance costs, and (3) are intended to store water prior to treatment, rather than treated water.

Table 2-1: Summary of Reservoir Storage within the San Diego Region

<table>
<thead>
<tr>
<th>Agency</th>
<th>Reservoir</th>
<th>Total Capacity (acre-ft)</th>
<th>Storage (April 2021) (ACRE-ft)</th>
<th>Storage as % of Capacity (April 2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad Municipal Water District</td>
<td>Maerkle</td>
<td>600</td>
<td>53</td>
<td>9%</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>Dixon</td>
<td>2,606</td>
<td>2,495</td>
<td>96%</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>Wohlford</td>
<td>2,783</td>
<td>1,898</td>
<td>68%</td>
</tr>
<tr>
<td>Fallbrook Public Utility District</td>
<td>Red Mountain</td>
<td>1,335</td>
<td>686</td>
<td>51%</td>
</tr>
<tr>
<td>Helix Water District</td>
<td>Cuyamaca</td>
<td>8,195</td>
<td>856</td>
<td>10%</td>
</tr>
<tr>
<td>Helix Water District</td>
<td>Jennings</td>
<td>9,790</td>
<td>8,592</td>
<td>88%</td>
</tr>
<tr>
<td>Poway, City of</td>
<td>Poway</td>
<td>3,432</td>
<td>3,296</td>
<td>96%</td>
</tr>
<tr>
<td>Rainbow Municipal Water District</td>
<td>Morro Hill</td>
<td>465</td>
<td>172</td>
<td>37%</td>
</tr>
<tr>
<td>Ramona Municipal Water District</td>
<td>Ramona</td>
<td>12,000</td>
<td>1,310</td>
<td>11%</td>
</tr>
<tr>
<td>San Diego County Water Authority</td>
<td>Olivenhain</td>
<td>24,774</td>
<td>18,528</td>
<td>75%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>Barrett</td>
<td>34,806</td>
<td>20,500</td>
<td>59%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>El Capitan</td>
<td>50,733</td>
<td>30,611</td>
<td>60%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>Hodges</td>
<td>13,401</td>
<td>11,419</td>
<td>85%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>Lower Otay</td>
<td>47,067</td>
<td>36,206</td>
<td>77%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>Miramar</td>
<td>6,682</td>
<td>5,563</td>
<td>83%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>Morena</td>
<td>16,742</td>
<td>5,570</td>
<td>33%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>Murray</td>
<td>4,684</td>
<td>4,137</td>
<td>88%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>San Vicente</td>
<td>249,358</td>
<td>179,706</td>
<td>72%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>Sutherland</td>
<td>29,508</td>
<td>10,987</td>
<td>37%</td>
</tr>
<tr>
<td>Santa Fe Irrigation District</td>
<td>San Dieguito</td>
<td>883</td>
<td>457</td>
<td>52%</td>
</tr>
</tbody>
</table>
Figure 2-3: San Diego County Reservoirs\(^3\)

2.4 County Stormwater Capture Study

In 2018, the County of San Diego, in collaboration with ESA, Brown and Caldwell, Burns and McDonnell, and Katz and Associates, completed a Stormwater Capture and Use Feasibility Study (County Stormwater Capture Study) with funding from a San Diego Integrated Regional Water Management (IRWM) planning grant. The County Stormwater Capture Study provides guidance on stormwater capture alternatives and identified the potential for 2,200 to 22,000 acre-feet per year of additional stormwater capture opportunities within the region on public parcels and rights-of-way, beyond what is already captured in surface water reservoirs. This represents between 0.5% – 5% of the total annual water use within San Diego County. Though private parcels were not the focus of the County Stormwater Capture Study, additional stormwater can potentially be captured on these parcels, such as through onsite capture and reuse systems. The study can be accessed at the following website: http://www.projectcleanwater.org/stormwater-capture-and-use-feasibility-study.

The County Stormwater Capture Study analyzed the near- and long-term feasibility of the implementation of various stormwater capture alternatives and estimated an approximate cost per acre-ft for each alternative, as listed in Table 2-2. These can be compared to the costs of alternative water supplies, which are provided in Table 2-3. Costs associated with each alternative may change over time. The costs in Table 2-2 vary significantly because different assumptions for capture volumes and project size were used to develop the costs. Lower capture volumes (e.g. 40 acre-ft per year) resulted in higher annualized costs per acre-ft, and higher capture volumes (e.g. 3,500 acre-ft per year) resulted in lower annualized costs per acre-ft.

Table 2-2: County Stormwater Capture Study Stormwater Use Alternatives Cost per Acre-Ft

<table>
<thead>
<tr>
<th>STORMWATER USE ALTERNATIVE</th>
<th>ANNUALIZED COST PER ACRE-FT (2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Infiltration Basin for Groundwater Recharge</td>
<td>$263–$97,825</td>
</tr>
<tr>
<td>(A) Injection Wells for Groundwater Recharge</td>
<td>$219–$33,922</td>
</tr>
<tr>
<td>(B) Infiltration Basin to Restore Natural Hydrology</td>
<td>$263–$84,803</td>
</tr>
<tr>
<td>(B) Biofiltration Basin to Restore Natural Hydrology</td>
<td>$416–$15,198</td>
</tr>
<tr>
<td>(C) Irrigation</td>
<td>$41,581–$698,339</td>
</tr>
<tr>
<td>(D) Rain Barrels</td>
<td>$2,736–$0</td>
</tr>
<tr>
<td>(E) Wetland Treatment</td>
<td>$296–$2,298</td>
</tr>
<tr>
<td>(F) Dry Weather Wastewater Diversion</td>
<td>$8,098–$10,505</td>
</tr>
<tr>
<td>(G &amp; H) Wastewater Diversion for Recycled Water / Potable Water</td>
<td>$13,897–$425,219</td>
</tr>
</tbody>
</table>

4 ESA Associates. “San Diego Stormwater Capture and Use Feasibility Study: Cost Analysis”. September 10, 2018. Based on a 25-year project lifespan and 0.1–24.7-acre project size depending upon the alternative. Costs were adjusted to 2021 dollars using the Engineering News Record (ENR) cost indices for June 2018 and June 2021.
### Table 2-3: Cost of Alternative Water Supply

<table>
<thead>
<tr>
<th>WATER SUPPLY SOURCE</th>
<th>ANNUALIZED COST PER ACRE-FT (2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imported Water</td>
<td>$1,769–$1,833</td>
</tr>
<tr>
<td>Indirect Potable Use</td>
<td>$2,000–$4,000</td>
</tr>
<tr>
<td>Desalination</td>
<td>$2,866–$4,483</td>
</tr>
</tbody>
</table>

### 2.5 Regional Studies, Programs, and Incentives

There have been several local stormwater capture studies and programs that have helped to advance stormwater capture concepts within the San Diego region, such as those listed in Table 2-4. The Water Authority administers, supports, and funds cost-effective programs related to natural resources, water-use efficiency, water recycling, potable reuse, water quality technologies, groundwater, stormwater, climate change response, flood management, and water-related public engagement throughout the region.7

### Table 2-4: Regional Stormwater Capture-Related Studies, Programs, and Incentives

<table>
<thead>
<tr>
<th>LEAD AGENCY</th>
<th>STORMWATER CAPTURE STUDIES</th>
<th>STORMWATER CAPTURE PROGRAMS AND INCENTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan Water District of Southern California</td>
<td>Final Groundwater Assessment Study</td>
<td>Local Resources Program $250 per acre-ft incentive for local recycled water and groundwater recovery projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recharge Pilot Program Funding for materials, construction, and groundwater modeling studies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Direct Use Pilot Program Funding for design, material, construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Local Water Supply Development Program $200 per acre-ft incentive for beneficial reuse projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rain Barrel and Cistern Rebate Program $35 per rain barrel or $250–$350 for a cistern incentive</td>
</tr>
<tr>
<td>Olivenhain Municipal Water District</td>
<td>San Dieguito Groundwater Study (2017)</td>
<td></td>
</tr>
</tbody>
</table>

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5 Water Authority; 2021 and 2022 calendar year all-in rates for treated water.
6 Water Authority; Carlsbad Desalination Fiscal Year 2020 and projected Fiscal Year 2021 costs from October Board update and Camp Pendleton (2013) costs; does not include conveyance costs. 2013 and 202 costs were adjusted to 2021 dollars using the Engineering News Record (ENR) cost indices for June 2013, June 2020, and June 2021.
7 Source: [https://www.sdcwa.org/projects-programs/grants](https://www.sdcwa.org/projects-programs/grants)
2.6 Stormwater Use Benefits

Capture and use of stormwater can offer several benefits, including pollution reduction, abatement of flooding, water supply augmentation, habitat restoration and groundwater recharge. In 2021, the California Stormwater Quality Association (CASQA) conducted a poll to ascertain what its members (regulatory agency staff, local agency staff, and consultants) felt were the top drivers for stormwater capture projects. The poll indicated that the primary drivers for stormwater capture projects are permit compliance/water quality (63%), flood control/drainage (18%), groundwater recharge (9%), water supply (8%), and other (2%). Due to their high cost, stormwater capture projects are most efficient when they can meet multiple objectives (stormwater compliance, flooding reduction, and water supply, for example). Of these benefits, water supply is the primary benefit that applies to the Water Authority. Other agencies focus on permit compliance, flood control, and groundwater recharge.

2.7 Stormwater Capture and Use Challenges

There are several challenges that can impact the feasibility of stormwater capture and use, many of which are not unique to the San Diego region. Some of these challenges are related to cost, regulatory requirements, site constraints, and technical challenges.
The 2021 CASQA poll also queried its members what their top stormwater capture barriers were. The results indicated that the top stormwater capture barriers include lack of funding (32%), regulations/policy (29%), lack of guidance/expertise (16%), legal/water rights (9%), technology (6%), and other barriers (7%).

During the wet season, demand for water decreases, but the supply of stormwater increases. In 2020, 61% of the City of San Diego’s potable water usage for the year occurred between May and October, compared to 39% between November and April. There is a decreased need for irrigation during the wet season due to the availability of rain. This is in stark contrast to the timing of rainfall; the City of San Diego has found that on average, 90% of the annual rainfall occurs between the months of November and April, and 93% of local runoff occurs from December through May.8 Due to the time delay between when stormwater runoff is generated and when that water may be needed, a significant amount of storage is needed to bridge the gap between demand and supply.

Region-specific and project-specific challenges to stormwater capture and use were reviewed during development of the stormwater capture feasibility models (Chapter 4).

2.8 Funding Opportunities for Stormwater Capture

The County Stormwater Capture Study discusses the Stormwater Proposition grant program as a source of stormwater funding; this program is still active and awarded Round 2 grants in 2020. This and other potential sources of funding and financing are listed in Table 2-5. Multiple-benefit projects, or projects that can result in multiple positive outcomes (such as water supply and water quality improvement) are more likely to receive grant funding. Note that these programs may not have active solicitations, and the specific applicability of these programs to the project would need to be further reviewed.

Table 2-5: Potential Stormwater Capture Funding and Financing Programs

<table>
<thead>
<tr>
<th>Sponsoring Agency</th>
<th>Grant or Financing Program</th>
<th>Program Webpage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureau of Reclamation</td>
<td>WaterSMART Drought Response Program</td>
<td></td>
</tr>
<tr>
<td>California Department of Water Resources</td>
<td>Integrated Regional Water Management Grant</td>
<td><a href="https://water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs">https://water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs</a></td>
</tr>
</tbody>
</table>

### Sponsoring Agency

<table>
<thead>
<tr>
<th>Sponsoring Agency</th>
<th>Grant or Financing Program</th>
<th>Program Webpage</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Natural Resources Agency (CNRA)</td>
<td>Urban Flood Protection Grant Program</td>
<td><a href="https://resources.ca.gov/grants/ufp">https://resources.ca.gov/grants/ufp</a></td>
</tr>
<tr>
<td>Federal Emergency Management Agency (FEMA)</td>
<td>Pre-Disaster Mitigation Grant: Flood Mitigation</td>
<td><a href="https://www.fema.gov/pre-disaster-mitigation-grant-program">https://www.fema.gov/pre-disaster-mitigation-grant-program</a></td>
</tr>
<tr>
<td>State Water Resources Control Board</td>
<td>Stormwater Proposition Grant Program</td>
<td><a href="https://www.waterboards.ca.gov/water_issues/programs/grants_loans/swgp/prop1">https://www.waterboards.ca.gov/water_issues/programs/grants_loans/swgp/prop1</a></td>
</tr>
<tr>
<td>State Water Resources Control Board</td>
<td>Water Recycling Funding Program (WRFP)</td>
<td><a href="https://www.waterboards.ca.gov/water_issues/programs/grants_loans/water_recycling">https://www.waterboards.ca.gov/water_issues/programs/grants_loans/water_recycling</a></td>
</tr>
<tr>
<td>United States Environmental Protection Agency (US EPA)</td>
<td>NPDES Implementation Grants (319 Program)</td>
<td><a href="https://www.waterboards.ca.gov/water_issues/programs/nps/319grants.html">https://www.waterboards.ca.gov/water_issues/programs/nps/319grants.html</a></td>
</tr>
<tr>
<td>US EPA</td>
<td>Water Infrastructure Finance and Innovation Act (WIFIA)</td>
<td><a href="https://www.epa.gov/wifia">https://www.epa.gov/wifia</a></td>
</tr>
</tbody>
</table>

In addition to grant funding, Caltrans has recently funded capital costs for multiple stormwater capture projects through a Cooperative Implementation Agreement and the local agency that has jurisdiction over the project. This allows Caltrans to apply the benefits of these projects towards its NPDES compliance requirements. Two case studies of these Caltrans-funded projects are discussed in Section 4.2.
3.0 Stormwater Capture Alternatives Review

In 2017, the County of San Diego and San Diego region MS4 Permit Co-permittees prepared the San Diego Region Functionally Equivalent Storm Water Resource Plan (SWRP). This plan identified and prioritized the region’s stormwater capture opportunities. Opportunities were then further refined through the County Stormwater Capture Study by applying specific parcel screening criteria that accounted for site and technical constraints, and modeling more of these sites for specific use alternatives. This Study narrows the suite of options further, using water supply as the primary project driver.

This study advances two potential stormwater capture scenarios to evaluate feasibility based on high-level considerations, such as volume of water and ease of delivery, difficulty of storage and treatment, and other factors. Stormwater capture alternatives which offer the largest volume of water were prioritized over those which only offer a small volume of water. Potential capture sites were also identified in order to provide a framework within to assess the estimated cost per acre-ft.

3.1 Stakeholder Engagement

During the development of this Study, the Water Authority reached out to its Member Agency Managers (MAM), and to the County and City of San Diego, with the following objectives:

1. To request studies and data pertaining to stormwater capture and potential stormwater capture sites.
2. To discuss stormwater capture opportunities previously identified as well as new ideas.
3. To aid the selection of two stormwater capture scenarios for this study.
4. To discuss forthcoming studies that may be analyzing the feasibility of stormwater capture scenarios in greater detail.

Various scenarios were discussed with stakeholders, including the following:

- Diversion of dry weather flows into wastewater collection system
- Aquifer storage and recovery (ASR) along river via groundwater injection or infiltration
- Diversion of stormwater flows to an existing reservoir
- New dam with linkage to delivery system
- Raise an existing dam to store additionally captured stormwater
- Large green infrastructure opportunities
- Stormwater capture on private parcel sites, and more specifically the use of rain barrels
- Stormwater capture on parcels that have an industrial land use and golf courses

Based on discussions and research of these options, a select number of capture scenarios were selected to advance for further review.

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3.2 Data Collection

There is a significant existing body of work related to stormwater capture in San Diego County. Data were provided primarily by the County of San Diego and City of San Diego. A stormwater resources spreadsheet was developed (see Appendix A) to briefly summarize each study or resource and its relevance to stormwater capture feasibility in the region.

The consultant and Water Authority team (team) developed a list of criteria impacting stormwater capture feasibility to guide data collection and stakeholder coordination efforts as well as facilitate selection of potential stormwater capture locations and methods. These criteria included the following:

- Project study focus on water supply
- Volume and seasonality of water supply and stormwater
- Contributing watershed(s)
- Regulatory considerations
- Hydrogeologic characteristics (e.g., permeability and groundwater quality)
- Water quality
- Infrastructure needed to capture, treat, and deliver (e.g., dams, facilities, pipes, pumps)
- High-level unit costs, life cycle costs, and $/acre-ft assumptions
- Land ownership and water rights
- Available footprint for stormwater capture

The team identified or requested data related to the following to support development of stormwater capture opportunity models:

- Hydrogeologic data
- Evaluation of future supply and demand needs
- GIS information characterizing local watersheds, surface storage, topography, stormwater collection system, land use data, Authority facilities, and distribution network
- Information related to existing surface storage and dams
- Rain gauge and rainfall intensity data
- Data on recharge and aquifer surface recharge opportunities
- Information about private and public land ownership within the study area
- Projected future rainfall projections based on climate change assessments

Regional stormwater capture studies, programs, and incentives identified during stakeholder engagement and data collection efforts are summarized in Section 2.8.

A significant amount of GIS data is available on the San Diego Regional GIS (SanGIS/SANDAG) Data Warehouse. These data were utilized for the stormwater capture analysis and included the following: hydrologic soil groups, parcels, hydrologic basins and watersheds, slopes, precipitation, creek and river flowlines, land use, topographic information, and groundwater basins. The County of San Diego also developed a database of public parcels that were screened for stormwater capture feasibility; these parcels were evaluated as potential sites for stormwater capture during development of the County Stormwater Capture Study but were not evaluated as part of this study.
3.3 Concept Screening

Two alternatives from the County Stormwater Capture Study were selected for further review, based on discussion with stakeholders:

- **Model #1**: Diversion of stormwater flows to an existing reservoir or raw water pipeline.
- **Model #2**: Aquifer storage and recovery (ASR) along river via groundwater injection or infiltration.

Many other stormwater capture opportunities were discussed, but not advanced for further review. These can be studied as part of a future effort within the region. A selection of these is summarized in Table 3-1.

**Table 3-1: Additional Stormwater Capture Alternatives**

<table>
<thead>
<tr>
<th>Stormwater Capture Alternative</th>
<th>Description and Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Full-Capture Downstream Pump Stations</td>
<td>Use of large pump stations on major rivers in San Diego that are aimed at capture of 100% of the stormwater flows. These pumps would need to be located as far downstream as possible to allow the benefits of stormwater flows within the channel to be fully realized, but not so far as to experience saltwater intrusion.</td>
</tr>
<tr>
<td>Freshwater Storage in Ocean</td>
<td>Involves constructing a reservoir in the ocean, similar to the Marina Bay in Singapore, which captures runoff directly from the mouth of rivers prior to entering the Ocean. In Singapore, this reservoir is projected to provide 10% of the water supply. Currently, there are significant cost and environmental challenges with this approach in California.</td>
</tr>
<tr>
<td>Small, Distributed Stormwater Capture Opportunities</td>
<td>Small, distributed stormwater capture opportunities were excluded from the scope of this study due to the difficulties of collecting and combining this water in a cost-effective way for treatment and storage. Examples of small, distributed stormwater capture opportunities include rain barrels, bioinfiltration basins, stormwater capture on private parcels, or other projects that are dependent on the precipitation at a specific site. Of these, rain barrels are currently incentivized in the San Diego region through the Water Authority’s Rain Barrel and Cistern Rebate Program. Over time, the feasibility of small, distributed stormwater capture opportunities may change.</td>
</tr>
<tr>
<td>Capture of Flows from Storm Drain System</td>
<td>As an alternative to capture of stormwater flows from a river or channel, flows could be captured directly from a storm drain system, which may result in less flow, but would not be as difficult to implement from an environmental perspective.</td>
</tr>
<tr>
<td>Onsite Irrigation Reuse</td>
<td>As an alternative to conveying flows to a reservoir, which may be located a significant distance from the stormwater capture site, onsite reuse of the stormwater may be more efficient and cost-effective, if there is enough demand. Onsite infiltration can be used in conjunction with an onsite irrigation reuse project.</td>
</tr>
</tbody>
</table>
### Stormwater Capture Alternative

<table>
<thead>
<tr>
<th>Diversion of Stream Dry Weather Flows into Wastewater Collection System</th>
</tr>
</thead>
</table>

**Description and Discussion**

Dry weather flow diversion from Los Peñasquitos Creek, which would be directed to a pump station located west of I-5 to the North City Reclamation Plant, where it could be integrated into the PureWater Program. This would reduce the impacts of urbanization on the Lagoon, which is currently impaired by excessive sedimentation and year-round accelerated freshwater flows. Freshwater flows displace native salt marsh species that cannot compete with invasive wetland species in year-round freshwater conditions. Redirecting stormwater flows away from Los Peñasquitos Lagoon can help to restore its ecology.

This stormwater capture alternative is currently being studied in detail by the City of San Diego to evaluate the annual volume capture, costs per volume, constraints, and opportunities. Deliverables will include concept drawings, cost estimates, pretreatment and permitting requirements, and an implementation schedule. This study will help to inform an overall strategic approach for City-wide dry weather diversions. The scope and/or scale of this analysis may change prior to project completion.

### 3.4 Project Siting Considerations

Potential capture sites were selected in order to conduct a high-level assessment of the feasibility of the two models, and the findings have been generalized to the San Diego region. Each of these scenarios could apply to various locations within San Diego County. A detailed, site-specific evaluation is necessary to understand the feasibility for specific projects, and these evaluations would need to be vetted through the relevant local agency(ies) and/or property owner(s). Major considerations for siting projects include the following:

- Location and distance (≤5-6 miles) from likely delivery point(s)
- Site footprint, and usable space for storage and treatment
- Environmental, permitting, and regulatory considerations
- Land ownership
- Water or pueblo rights
- Aquifer restrictions and hydrogeologic characteristics, including size, depth, infiltration rate, permeability, groundwater quality, and extraction rate
- Pre-treatment and treatment requirements given the timing of flows, stormwater runoff constituents, and intended beneficial reuse
- Capacity restrictions, if discharging to an existing facility (reservoir, raw water pipeline, etc.)
- Whether the site was identified as having stormwater capture potential through the County Stormwater Capture Study

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4.0 Stormwater Capture Feasibility Assessment

Example stormwater capture and use scenarios were reviewed at a high level in order to assess the capture volume, benefits, constraints, and general feasibility of a select number of stormwater capture strategies within the San Diego region. Each stormwater capture scenario is contextualized to the region by selecting a watershed, approximate location, and capture approach to consider as representative models for stormwater capture feasibility. A detailed and project-specific analysis would be needed to fully assess each project scenario.

The two selected scenarios include:

- **Model #1**: Stormwater capture from a major river within the San Diego region, storage, pretreatment, and conveyance to reservoir (Model #1a) or raw water pipeline (Model #1b) for treatment and potable use.

- **Model #2**: Stormwater capture from a major river within the San Diego region, storage, treatment, and infiltration (Model #2a) or injection (Model #2b) into groundwater for later extraction and use.

This chapter describes the benefits and challenges of each model, what pretreatment and treatment may be required, how the flow diversion from the channel was calculated and optimized, and the considerations for future studies to verify suitability of the groundwater infiltration/injection alternative in the context of local groundwater resources. A summary of the annualized costs per acre-ft are provided in Chapter 5.0. Table 4-5 describes the high-level benefits and challenges with both models.
## Table 4-1: Stormwater Capture Model-Specific Benefits and Challenges

<table>
<thead>
<tr>
<th>Project Benefits</th>
<th>Project Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits of both Models (#1 and #2)</strong></td>
<td><strong>Challenges of both Models (#1 and #2)</strong></td>
</tr>
<tr>
<td>• <strong>Supplementation of water supply.</strong> Additional stormwater could be captured in urban areas and stored in an existing reservoir. This could result in supplementation of the region’s water supply.</td>
<td>• <strong>Environmental Considerations.</strong> There are ecological and environmental considerations associated with diverting stormwater runoff directly from a major river or creek. Ideally, the project would be sited within a concrete channel to minimize environmental impacts of a stormwater capture project within a natural channel.</td>
</tr>
<tr>
<td>• <strong>Reduction of downstream flooding.</strong> Removal of a portion of the flows in the creek, river, or flood control channel can help to reduce the potential for flooding downstream of the capture location, though high flows would be bypassed by the system.</td>
<td>• <strong>Water Losses Associated with Treatment.</strong> Some water will be lost through storage in the subsurface and treatment. The amount of water that will be lost has not been assessed by this study and would need to be considered for further concept development.</td>
</tr>
<tr>
<td>• <strong>Improved Downstream Water Quality.</strong> There are some water quality benefits achieved through intercepting urban stormwater before it is discharged to the ocean untreated, but because the project would maintain baseflows in the river, not all of the “first flush” of rainfall (which carries the highest pollutant load) would be removed and treated.</td>
<td>• <strong>Seasonal-Dependent.</strong> Stormwater flows are dependent upon seasonal rainfall. This model does not involve enough storage to provide a drought-resistant water supply source. Indirect potable reuse of wastewater, by contrast, is not seasonally limited and is therefore much more drought resistant.</td>
</tr>
</tbody>
</table>

### Additional Reservoir Augmentation Benefits (Model #1)

- **Maximizes Use of Existing Facilities.** Use of an existing reservoir for storage avoids the need for a significant amount of onsite storage. The onsite storage can be minimized due to the steady rate of outflow. Directing non-potable water to a reservoir or raw water pipeline to be treated further by a drinking water treatment plant is also a more cost-effective means of treating water to drinking water standards compared to installation of smaller onsite drinking water treatment facilities.

### Additional Reservoir Augmentation Challenges (Model #1)

- **Reservoir Discharge Approvals.** Augmentation of the reservoir storage would need to be coordinated with reservoir storage management protocols and would likely need to be approved by DSOD. Diverting stormwater flows to a reservoir would require obtaining of storage rights in the reservoir that these flows are directed to.
- **Treatment.** Stormwater captured downstream of reservoirs cannot be directed to the reservoirs without pre-treatment, because it has collected pollutants through intersection with the urban landscape.
- **Raw Water Pipeline Capacity.** If the model involves discharge to a raw water pipeline instead of a reservoir, the treatment requirements are the same, and there is an added consideration of the capacity of the raw water pipeline if the volume of water is significant.
<table>
<thead>
<tr>
<th>Project Benefits</th>
<th>Project Challenges</th>
</tr>
</thead>
</table>
| **Additional Groundwater Infiltration/Injection Benefits** *(Model #2)*  
  - **Improved Groundwater Quality.** Over time, as additional treated stormwater is added to the aquifer, the aquifer quality will improve, which may result in lower treatment costs after extraction.  
  **Additional Groundwater Infiltration Benefits (Model #2a)**  
  - **Natural Treatment.** Natural filtration of stormwater runoff occurs through the soil column between the infiltration site and the aquifer, which can improve water quality.  
| **Additional Groundwater Infiltration/Injection Challenges (Model #2)**  
  - **Lack of Regulatory Clarity.** Regulatory requirements for stormwater treatment for groundwater injection or infiltration are not straightforward. A site-specific analysis that considers the land use of the upstream watershed and potential stormwater pollutants, as well as the quality of water in the groundwater aquifer, is necessary to truly ascertain pre-treatment requirements. Over time, regulations may change to further clarify levels of stormwater treatment needed for groundwater injection.  
  - **Treatment.** Surface application (infiltration) and groundwater injection to a drinking water aquifer requires a high level of treatment, even if the water within the aquifer will also be treated upon extraction.  
  - **Recovery Return.** Not all the water injected or infiltrated into the aquifer will be possible to extract. Depending upon the quality of the aquifer and level of treatment required, the recovery return, or the percentage of water that can be extracted compared to the amount of water injected, can vary from 10% to 60%.  
  - **Suitability of Sites and Hydrogeologic Characteristics of Target Aquifers.** A detailed, site-specific analysis would be needed to verify the suitability of aquifers for infiltration and aquifer storage and recovery. |
4.1 Stormwater Capture Model Assumptions

4.1.1 Reservoir Augmentation (Model #1) Assumptions
Stormwater capture model #1 involves capturing water from a major river in the San Diego region, storing it, pretreating it, and conveying it to a reservoir (model #1a) or raw water pipeline (model #1b) located upstream of a drinking water treatment plant for further treatment and potable use. A simple schematic of each model is provided in Figures 4-1 and 4-2.

![Figure 4-1: Reservoir Augmentation (Model #1a) Schematic](image)

![Figure 4-2: Raw Water Augmentation (Model #1b) Schematic](image)

Key challenges of this model include the environmental concerns with drawing water directly from a river, and the long conveyance system required to direct urban stormwater from the lower portion of the watershed to a reservoir. In addition, stormwater treatment requirements for discharge to a reservoir lack regulatory clarity, so a high level of treatment is assumed to be required in the absence of specific requirements.

4.1.2 Groundwater Infiltration/Injection (Model #2a/#2b) Assumptions
Stormwater capture model #2 involves either groundwater infiltration (model #2a) or injection (model #2b) to provide for groundwater storage and recovery (extraction) as a water supply source. Groundwater injection (also called direct infiltration) is defined by the City of San Diego October 2018 Storm Water Standards as, “Infiltration via methods or devices, such as dry wells or infiltration trenches, designed to bypass the mantle of surface soils that is unsaturated and more organically
active and transmit runoff directly to deeper subsurface soils.” A simple schematic of each of these models is provided in Figures 4-3 and 4-4.

![Figure 4-3: Groundwater Infiltration (Model #2a) Schematic](image)

![Figure 4-4: Groundwater Injection (Model #2b) Schematic](image)

Key challenges of this model include the environmental concerns with drawing water directly from a river, the long conveyance system required to direct urban stormwater from the lower portion of the watershed to a suitable site, the difficulty of siting a project given hydrogeological constraints and finding a suitable aquifer to maximize storage. In addition, stormwater treatment requirements for infiltration and injection to a potable aquifer lack regulatory clarity, so it is assumed that a high level of treatment would be required both when injecting or infiltrating and when extracting from the aquifer.

### 4.2 Stormwater Capture Case Studies

Both stormwater capture models involve stormwater capture from major rivers. Key rivers that could be considered as potential capture sites include the San Diego River, San Luis Rey River, and Los Peñasquitos Creek.

Other projects that have captured flows from creeks or channels have been constructed in California. The team evaluated two case studies: Orange Memorial Park Stormwater Capture project in South San Francisco, and the Bolivar Park Stormwater and Urban Runoff Capture Project (Bolivar Capture Project) in the City of Lakewood. Each of these projects was intended to reuse the water onsite for irrigation and treated the water to different standards for nonpotable irrigation reuse. Unlike these
projects, it is assumed that Model #1 and #2 will discharge to a raw water reservoir or aquifer intended for use as a public water supply and requires a higher standard of treatment. Metrics for these projects are summarized in Table 4-2.

Table 4-2: Metrics for Channel-Diversion Stormwater Capture Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Bolivar Park Stormwater and Urban Runoff Capture Project</th>
<th>Orange Memorial Park Stormwater Capture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Status</td>
<td>Constructed</td>
<td>Under construction</td>
</tr>
<tr>
<td>Watershed Captured</td>
<td>3,018 acres</td>
<td>6,577 acres</td>
</tr>
<tr>
<td>Channel Diverted</td>
<td>Los Cerritos Flood Control Channel (Concrete-Lined)</td>
<td>Colma Creek (Concrete-Lined)</td>
</tr>
<tr>
<td>Method of Diversion</td>
<td>Inflatable rubber dam and drop inlet within channel, then to actuated valve</td>
<td>Passive diversion pipe at base of channel (no flow obstructions)</td>
</tr>
<tr>
<td>Diversion Volume per Year</td>
<td>623 acre-ft</td>
<td>640 acre-ft (16% of total annual runoff in channel)</td>
</tr>
<tr>
<td>Storage Volume</td>
<td>8.9 acre-ft</td>
<td>200,000-gallon cistern; 1.6 MG infiltration gallery</td>
</tr>
<tr>
<td>Construction Cost</td>
<td>$8.8 million</td>
<td>$15.5 million</td>
</tr>
<tr>
<td>Ongoing O&amp;M Costs</td>
<td>$90,000</td>
<td>$150,000–$500,000</td>
</tr>
<tr>
<td>Annualized Cost per Acre-Ft (25-year period; 3.5% interest rate)</td>
<td>$16,500</td>
<td>$28,100–$37,100</td>
</tr>
<tr>
<td>Treatment Approach</td>
<td>Pretreatment prior to entry into pump station; flows either infiltrated onsite or treated for irrigation use onsite</td>
<td>Pretreatment with grit/trash chamber prior to entry into underground storage; flows either infiltrated onsite or treated for irrigation use onsite; flows not used or infiltrated are returned to the creek after treatment</td>
</tr>
<tr>
<td>Treatment Standard(s)</td>
<td>National Sanitation Foundation (NSF) 250 standards for non-potable water as well as Los Angeles County</td>
<td>IAPMO 324 certified graywater treatment system used to meet SB 966 requirements</td>
</tr>
</tbody>
</table>

14 SB 966 requirements are not enforceable until the end of 2022, but the project designed the project to the new standard.
Another example of stormwater capture from within a channel is the Santa Margarita Water District’s “San Juan Watershed Project”, for which an Environmental Impact Report was completed in May 2019 [http://sanjuanwatershed.com/](http://sanjuanwatershed.com/). It involves capture of stormwater from San Juan Creek using inflatable rubber dams. This project may be a good example to watch as it develops because it involves diversion of flows from a natural channel and is different from the Bolivar Park and Orange Memorial Park Stormwater Capture Projects analyzed above.

### 4.3 Model-Specific Regulatory Considerations

A matrix defining regulatory considerations for various stormwater capture scenarios is provided in the County Stormwater Capture Study (refer to Table 5, “Regulatory Framework for Beneficial Uses”, of the Framework and Data Memorandum of the County Stormwater Capture Study). Table 4-3 is based upon this matrix, but is revised for the models considered as part of this study (potable water reservoir augmentation and infiltration or injection to aquifers utilized for drinking water supply as supplementation for potable use).

**Table 4-3: Regulatory Framework for Stormwater Capture Models**

<table>
<thead>
<tr>
<th>Regulatory Jurisdiction</th>
<th>County Stormwater Capture Study Reference Section</th>
<th>Beneficial Use Model #1: Reservoir Augmentation</th>
<th>Beneficial Use Model #2A: Groundwater Infiltration for Potable Use</th>
<th>Model #2B: Groundwater Injection for Potable Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>20/20 Potable Water Reduction</td>
<td>2.2.9</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>California Department of Fish and Game</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>California Department of Water Resources Division of Safety of Dams (DSOD)</td>
<td>N/A</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>California Division of Drinking Water, Surface Water and Groundwater Treatment Rules (for Drinking Water Use Purposes)</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

15 Drinking water used to be regulated by the California Department of Health, but is now regulated by the California Division of Drinking Water under the State Water Resources Control Board.
<table>
<thead>
<tr>
<th>Regulatory Jurisdiction</th>
<th>County Stormwater Capture Study Reference Section</th>
<th>Model #1: Reservoir Augmentation</th>
<th>Model #2A: Groundwater Infiltration for Potable Use</th>
<th>Model #2B: Groundwater Injection for Potable Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Health and Safety Code</td>
<td>2.2.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California Water Code</td>
<td>2.2.1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>California Environmental Quality Act (CEQA)</td>
<td>2.2.6</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Federal Clean Water Act</td>
<td>2.1.1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Construction General Permit</td>
<td>2.2.3</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>County of San Diego JRMP</td>
<td>2.3.3</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>County of SD Watershed Protection, Stormwater Management, and Discharge Control Ordinance</td>
<td>2.3.4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Porter-Cologne Water Quality Control Act</td>
<td>2.2.2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>San Diego Basin Study</td>
<td>2.3.7</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>San Diego County Flood Control District</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>San Diego County Groundwater Ordinance</td>
<td>2.3.5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>San Diego County Zoning Ordinance</td>
<td>2.3.6</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>SB 985</td>
<td>2.2.7</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>SD MS4 Permit / Regional Water Quality Control Board</td>
<td>2.3.1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>State 303(d) List</td>
<td>2.2.5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>State Water Resources Control Board Division of Water Quality/Division of Water Rights</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sustainable Groundwater Management Act</td>
<td>2.2.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US EPA Underground Injection Control Program</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States Army Corps of Engineers</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>United States Fish &amp; Wildlife Service</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Water Quality Control Plan for San Diego Basin</td>
<td>2.3.2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

CEQA: California Environmental Quality Act; EPA: Environmental Protection Agency; JRMP: Jurisdictional Runoff Management Program; MS4: Municipal Separate Storm Sewer System; SB: Senate Bill; WWTP = Wastewater Treatment Plant

Each of the selected scenarios involves diverting streamflows from a natural channel, a practice that is within the jurisdiction of several regulatory agencies. Stormwater from a river that receives urban runoff is considered a point source discharge subject to NPDES requirements when directed to a
surface water body. The exact level of treatment required depends upon the constituents in the stormwater at the location where the water is captured, the water body to which it will be discharged, and end use (potable, nonpotable, etc.). Stormwater constituents may include nutrients (nitrogen, phosphorus, etc.), temperature, pH, dissolved oxygen, turbidity, total dissolved solids (TDS), algae, petroleum, bacteria, herbicides, and pesticides. The quality of water discharged to the reservoir should be the same or better than that of the quality of water that enters the reservoir from upstream undeveloped areas.
### Table 4-4: Stormwater Capture Model-Specific Regulatory Considerations

**Project Regulatory Considerations**

<table>
<thead>
<tr>
<th>Regulatory Considerations for both Models (#1 and #2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
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<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Additional Reservoir Augmentation Regulatory Considerations (Model #1a)**
- **303(d) Listed Water Bodies.** If the drinking water reservoir is listed on the 303(d) list as impaired, transferring treated stormwater could be an issue because it has the potential to increase the pollutants of concern.
- **Inter-Basin Transfer Permit.** Moving the water from the river to the lake may trigger an inter-basin transfer permit.

**Additional Groundwater Infiltration/Injection Regulatory Considerations (Model #2a/#2b)**
- **Safe Drinking Water Act.** The Safe Drinking Water Act (SDWA) requires that the US EPA protects Underground Sources of Drinking Water (USDWs) from injection activities, and the EPA sets minimum standards to address threats posed by all injection wells, including stormwater injection wells. The EPA-administered Underground Injection Control (UIC) program requires that the injection does not endanger a USDW. In California, authority for implementation of the UIC program falls under the local permitting authority. EPA notes that, "The appropriateness and effectiveness of BMPs vary according to the type, design, setting, and operation of the well. Consult your permitting authority for additional information and to learn about location-specific BMPs."[^16]
- **Aquifer Quality.** Regulatory permitting difficulty and treatment cost increases as the quality of the groundwater basin increases.

[^16]: [https://www.epa.gov/uic/stormwater-drainage-wells](https://www.epa.gov/uic/stormwater-drainage-wells)
4.4 Model-Specific Treatment Considerations

Stormwater that is collected from a Municipal Separate Storm Sewer System (MS4)—which includes storm drains, as well as rivers, streams, and creeks in developed areas—and then discharged to a surface water body is considered a point source discharge subject to NPDES requirements, because it contains pollutants that cause or threaten to cause a violation of surface water quality standards as outlined in the Water Quality Control Plan for the San Diego Basin (Basin Plan).17 As projects are sited further downstream, the impacts of urbanization on the quality of the stormwater runoff increases. Projects sited further downstream will require more treatment and be more costly than projects sited upstream but could also capture more stormwater flow. Stormwater quality can also vary seasonally and year by year, making it difficult and costly to monitor and treat.

There is a lack of regulatory clarity surrounding the level of treatment necessary for stormwater capture and discharge to raw water reservoirs, raw water pipelines, and Underground Sources of Drinking Water (USDW). There are no regulations that specify specific treatment requirements for stormwater reuse; rather, there are requirements that the stormwater not endanger public health or the water body or aquifer to which it is discharged. Stormwater capture regulations are a developing area and would be beneficial to continue to track.

Recycled water standards for municipal wastewater could be applied to stormwater that is infiltrated or injected directly into a drinking water supply, or directed to a reservoir, in the absence of stormwater-specific treatment requirements. However, there are significant differences in the constituents of urban runoff and municipal wastewater that make it difficult to apply the recycled water requirements directly. In some ways, the treatment required is overly conservative, and in others (such as in the case of sediment) is inadequate to address all pollutants.

In 1999, the Environmental Protection Agency (EPA) developed a “Preliminary Data Summary of Urban Storm Water Best Management Practices”, which included a comparison of the constituents of urban runoff18 to municipal wastewater before and after treatment, as shown in Figure 4-5.

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17 NPDES MS4 Permit Order No. R9-2013-0001.
18 Stormwater runoff from urban areas.
As shown in Figure 4-5 above, the quality of urban runoff is similar to domestic wastewater after secondary treatment, except that Total Suspended Solids (TSS) is higher, lead and copper are slightly higher, and fecal coliform can range significantly depending upon the stormwater source. With this in mind, treatment for wastewater may not be well suited to the constituents in stormwater, though regulations have changed since the data in Figure 4-5 were developed. The above table is not a complete list of stormwater constituents; there may be others, such as heavy metals, that are of concern.

For the purposes of the model analyses, we have chosen to evaluate the scenarios according to these requirements in the following manner:

- For Model 1 (Discharge to a Reservoir), treatment consists of a combination of a hydrodynamic separator pretreatment followed by an equivalent level of treatment as that of a tertiary municipal wastewater treatment plant. This is one level of treatment below that which is required for recycled wastewater discharge to a drinking water reservoir, but with the added removal of sediment, trash, and hydrocarbons from the pretreatment device. Following discharge, this water would blend with the rest of the water in the reservoir and be further treated at a water treatment plant.

- For Model 2a (Infiltration to a Drinking Water Aquifer), treatment consists of a combination of a hydrodynamic separator pretreatment followed by an equivalent level of treatment as that of a tertiary municipal wastewater treatment plant. This is one level of treatment below that which is required for recycled wastewater discharge to a drinking water reservoir, but with the added removal of sediment, trash, and hydrocarbons from the pretreatment device. Following discharge, this water would blend with the rest of the water.

in the aquifer and be further treated at a water treatment plant. Natural treatment occurs in the subsurface due to the reduction of dissolved oxygen.

- For **Model 2b (Injection to a Drinking Water Aquifer)**, treatment consists of a combination of a **hydrodynamic separator pretreatment** followed by an equivalent level of treatment as that of **advanced municipal wastewater treatment**. This is the same level of treatment which is required for recycled wastewater discharge to a drinking water aquifer, but with the added removal of sediment, trash, and hydrocarbons from the pretreatment device. Following discharge, this water would blend with the rest of the water in the aquifer and be further treated at a water treatment plant. Natural treatment occurs in the subsurface due to the reduction of dissolved oxygen.

If these models were to be further developed, the proposed treatment level would be developed in collaboration with regulators to further vet the applicability of recycled water treatment requirements to stormwater and see if, given the small proportion of additional stormwater relative to the overall reservoir or aquifer size, a simpler treatment scheme (such as the use of a bioretention and hydrodynamic separator in a treatment train) would be sufficient.

### 4.4.1 Project Pretreatment

Initial pretreatment of flows from the river is recommended to remove trash and sediment before discharge to another treatment facility and prior to infiltration to preserve the life and functionality of the downstream systems. Stormwater can contain a high amount of sediment as well as other pollutants, such as heavy metals and hydrocarbons, at levels that are not anticipated in a domestic wastewater stream. Various levels of pretreatment are possible, as described in Table 4-5. For the purposes of this Study, it was assumed that a hydrodynamic separator would be used for pretreatment.

**Table 4-5: Levels of Stormwater Pretreatment**

<table>
<thead>
<tr>
<th>Pretreatment Device</th>
<th>Level of Treatment and Pollutants Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large trash screen</td>
<td>• Removes large solids and trash</td>
</tr>
<tr>
<td></td>
<td>• Bypasses sediment, oils, small pieces of trash, and other pollutants</td>
</tr>
<tr>
<td></td>
<td>• Not certified for full trash capture by the State Water Resources Control Board (SWRCB) 20</td>
</tr>
<tr>
<td>Trash and grit screen</td>
<td>• Removes trash and sediment</td>
</tr>
<tr>
<td></td>
<td>• Bypasses other pollutants</td>
</tr>
<tr>
<td></td>
<td>• Loose term; may or may not be a hydrodynamic separator</td>
</tr>
<tr>
<td></td>
<td>• May or may not be a certified full trash capture device by the SWRCB</td>
</tr>
<tr>
<td>Full trash capture device</td>
<td>• Removes trash and large sediment (&gt;5mm)</td>
</tr>
<tr>
<td></td>
<td>• Bypasses fine sediments (&lt;5mm) and other pollutants</td>
</tr>
<tr>
<td></td>
<td>• Certified for full trash capture by the SWRCB</td>
</tr>
</tbody>
</table>

20 The SWRCB’s list of Certified Full Trash Capture Devices is hosted on the California Stormwater Quality Association (CASQA) website: [https://www.casqa.org/resources/trash/certified-full-capture-system-trash-treatment-control-devices](https://www.casqa.org/resources/trash/certified-full-capture-system-trash-treatment-control-devices)
Landscape-based measures, like bioretention areas, can be effective at pollutant removal, but are also costly and difficult to scale for large flow rates, and can provide inconsistent effectiveness. A high-rate mechanical means of pretreatment is more predictable and cost-effective when treating large flows.

The Washington State Technology Assessment Protocol – Ecology, known as the Washington TAPE program, reviews and certifies stormwater treatment devices. These treatment devices are certified as achieving specified levels of pretreatment, targeting total suspended solids (TSS), petroleum, copper, zinc, and/or phosphorus. In addition to certifying devices for use as pretreatment, it certifies devices for many other levels of stormwater treatment.

There are seven hydrodynamic separator devices that currently (as of July 2021) have either a Conditional or General Use Level Designation certification for pretreatment, meaning that they have been evaluated and found to meet the program’s performance goals. This pretreatment certification confirms that the device can remove 50% of TSS for an influent concentration range of 100 mg/l to 200 mg/l. Though the devices may also remove other pollutants, like oils and sediment-laden pollutants such as polychlorinated biphenyls (PCBs) and mercury, they are only certified for removal of TSS through the Washington TAPE program.

The Jellyfish Filter (manufactured by Contech) is an example of a device that uses membrane filtration to remove oil, metals, hydrocarbons, and nutrients in addition to the trash, debris, sediment, and oils that can be removed by a hydrodynamic separator. The Jellyfish filter is certified for Basic

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and Phosphorus Treatment use by the Washington TAPE program, which means that it can remove 80% of TSS for an influent concentration range of 100 mg/l to 200 mg/l, and can remove 50% of total phosphorus for an influent concentration range of 0.1 to 0.5 mg/l.

If an infiltration project is located more than 100 feet away from drinking water wells, and more than 10 feet vertically from the seasonal high groundwater, pretreatment alone may be sufficient prior to infiltration, depending upon the local groundwater authority and local stormwater treatment requirements, as well as the land use of the contributing watershed. However, additional treatment would be required prior to infiltration or injection near or into a groundwater aquifer intended for water supply.

4.4.2 Water Treatment

The California Water Code (Section 13050) defines recycled water as “water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource”. A 2018 Recycled Water Policy Staff Report\(^\text{23}\) notes that, “The use of recycled water in California is part of an integrated water management approach that includes water conservation, capture and use of stormwater, aquifer storage and recovery, and other strategies to achieve a sustainable and reliable long-term water supply.” This staff report also indicates that the Recycled Water Policy applies to the following non-potable and potable recycled water uses:

- **Non-potable recycled water**, which is treated wastewater suitable for use other than potable use.
- **Indirect potable reuse for groundwater recharge**, which is planned use of recycled water for replenishment of a groundwater basin or aquifer that has been designated as a source of water supply for a public water system.
- **Reservoir water augmentation**, which is the planned placement of recycled water into a raw surface water reservoir used as a source of domestic drinking water supply for a public water system or into a constructed system conveying water to such a reservoir.

The State Water Resources Control Board prepared a summary of regulations related to recycled water, based upon the Title 17 and Title 22 Code of Regulations, which adopted Surface Water Augmentation regulations that became effective on October 1, 2018. These provisions include treatment requirements for indirect potable reuse through augmentation of a drinking water reservoir with recycled municipal wastewater, where recycled municipal wastewater is defined as “recycled water that is the effluent from the treatment of wastewater of municipal origin”. Table 4-6 summarizes the levels of treatment that are required for recycled water based on Title 17 and Title 22 standards.

### Table 4-6: Levels of Treatment for Recycled Water\(^{24}\)

<table>
<thead>
<tr>
<th>Treatment Level</th>
<th>Description</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtered Wastewater</td>
<td>Oxidized wastewater that (a) has been coagulated and passed through natural undisturbed soils or a bed of filter media to specific performance requirements, or (b) has been passed through a microfiltration, ultrafiltration, or nanofiltration.</td>
<td>Surface irrigation (where the recycled water does not come into contact with the edible portion of the crop)</td>
</tr>
<tr>
<td>Disinfected Secondary Recycled Water</td>
<td>Recycled water that has been oxidized and disinfected to reduce concentrations of total coliform bacteria in the effluent to specified amounts.</td>
<td>Surface irrigation (cemeteries, freeway landscaping, etc.)</td>
</tr>
<tr>
<td>Disinfected Tertiary Recycled Water</td>
<td>Filtered and subsequently disinfected wastewater.</td>
<td>Soil compaction, dust control, cleaning roads, etc.</td>
</tr>
<tr>
<td>Conventional Treatment</td>
<td>Treatment train that utilizes non-membrane-based treatment technologies (e.g., gravity sedimentation or media filtration unit process), coagulation and disinfection process, produces an effluent that meets the definition for disinfected tertiary recycled water.</td>
<td>Surface irrigation (food crops, parks, school yards, etc.)</td>
</tr>
<tr>
<td>Advanced Treatment</td>
<td>Treatment of oxidized wastewater, using a pretreatment system (micro- or ultra-filtration), reverse osmosis, and oxidation treatment processes.</td>
<td>Toilets, structural firefighting, decorative fountains, etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Same as above (disinfected tertiary recycled water)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Required for discharge of recycled water to a drinking water reservoir or aquifer</td>
</tr>
</tbody>
</table>

California state statutory and regulatory requirements for production, discharge, distribution, and use of recycled water for groundwater recharge and/or infiltration include the provisions noted in Table 4-7 (note that this list may not be comprehensive; further study would be needed for a comprehensive list).

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### Table 4-7: Groundwater Recharge/Infiltration Requirements for Recycled Water

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Relevant Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Water Code</td>
<td>Division 7 – Water Quality, Sections 13000 through 13999.16 (Water Code), including:</td>
</tr>
<tr>
<td></td>
<td>● <strong>CWC section 13240</strong> requires Regional Water Quality Control Boards (RWQCBs) to adopt Water Quality Control Plans (Basin Plans). These plans must contain water quality objectives for surface water and groundwater within the regions that provide reasonable protection of the beneficial uses of the waters.</td>
</tr>
<tr>
<td></td>
<td>● <strong>CWC section 13260</strong> requires that any person who proposes to discharge waste that could affect the quality of waters of the state to file with the RWQCB a report of waste discharge (ROWD).</td>
</tr>
<tr>
<td></td>
<td>● <strong>CWC section 13540</strong> prohibits the use of any waste well that extends into a water supply aquifer, unless the RWQCB finds that water quality considerations do not preclude the direct injection, and California Department of Public Health (CDPH) makes a finding that the recharge will not degrade the quality of the aquifer as a source of water supply for domestic purposes.</td>
</tr>
<tr>
<td></td>
<td>● <strong>CWC sections 13500 -13529.4 and 134562</strong> require CDPH to establish uniform statewide recycling criteria for each type of use of recycled water, when the use involves the protection of public health.</td>
</tr>
<tr>
<td></td>
<td>● <strong>CWC Section 13522.5</strong> requires any person who proposes to recycle or to use recycled water to file an Engineering Report with the RWQCB on the proposed use.</td>
</tr>
<tr>
<td>Health and Safety Code (H&amp;SC)</td>
<td>Chapter 4 – California Safe Drinking Water Act, sections 116270 et seq.</td>
</tr>
<tr>
<td></td>
<td>● <strong>H&amp;SC section 116455</strong> requires public water systems to take certain actions if drinking water exceeds Notification Levels (NLs). NLs are health-based advisory levels established by CDPH for chemicals in drinking water that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than their NLs, certain requirements and recommendations apply.</td>
</tr>
<tr>
<td>California Code of Regulations (CCR), Title 22</td>
<td>Social Security, Division 4 – Environmental Health, Chapter 3, Division 4 – Reclamation Criteria</td>
</tr>
<tr>
<td></td>
<td>● <strong>Sections 60301 through 60355 (Title 22)</strong> include requirements for the use of recycled water for irrigation, impoundments, cooling water, and other purposes. The Division of Drinking Water (DDW) regulates groundwater recharge projects under Title 22 and is done on a project-by-project basis. The regulations state that recycled water “shall be at all times of a quality that fully protects public health” and that DDW recommendations will be made on “an individual case basis” and “will be based on all relevant aspects of each project”.</td>
</tr>
<tr>
<td>CCR, Title 17</td>
<td>Public Health, Chapter 5, Subchapter 1, Group 4 – Drinking Water Supplies, Sections 7583 through 7630 (Title 17), including primary and secondary drinking water MCLs.</td>
</tr>
</tbody>
</table>

### 4.5 Diversion and Conveyance

#### 4.5.1 Reservoir Augmentation Diversion and Conveyance

In 2012, the City of San Diego undertook a “San Diego Recycled Water Study” (2012 San Diego Recycled Water Study), and reviewed reservoir augmentation opportunities in the context of indirect potable reuse. These same reservoirs can be considered opportunities for reservoir augmentation through stormwater. Even more reservoirs may present an opportunity for additional stormwater.
capture, because the amount of stormwater captured is much less than that which could be directed to the reservoirs through indirect potable reuse (300–3,500 acre-ft per year, compared to 18,000–100,000 acre-ft per year).

In this scenario, pumps would discharge treated stormwater from the lower part of a river to either a reservoir located near the lower watersheds, or flow could be conveyed to a reservoir located east, in the upstream portions of a watershed.

To determine how much flow could be captured with a river in San Diego, as an example case, United States Geological Survey (USGS) 30+ year streamflow gage data was reviewed for an urban location in the lower portion of a watershed. Figure 4-6 shows the daily average discharge information over the past 30 years, along with theoretical high (20 cfs) and low (4 cfs) target capture flows. Between the months of December and April, the streamflow in the river can, on average, be found to be less than 20 cfs. Note that a 30-year average streamflow will generally overestimate the amount of stream flow in the river, because in any given year, the flows will range drastically depending upon the duration and intensity of rainfall.

Rather than targeting large storms that occur infrequently and are unpredictable, the project will capture smaller storms that occur on an annual basis. The pumps will only be actuated when flows in the river reach a certain discharge level, so that base flows to the river are sustained. This is slightly different than the two project examples (Bolivar Creek and Orange Memorial Park), which focused on capturing and treating the lowest flows and "first flush" of rainfall. These other two projects were constructed in concrete channels, which do not have to maintain a base flow level for ecological reasons. In contrast, a natural creek would necessitate maintenance of base flows. Targeting a more constant rate of discharge can help to offer greater water supply reliability, resulting in a larger volume of stormwater diverted each year.

The diversion volume was calculated through use of a storage – discharge spreadsheet model. The following parameters were used to optimize the model:
• Capture threshold (e.g., 4 cfs streamflow in the river before capture occurs)
• Capture percentage (e.g., 50% of streamflows to be captured)
• Constant outflow rate (e.g., 1 MGD)
• Onsite storage capacity (e.g., 0.5 acre-ft)

Assumed values for these parameters were then applied to the 1982–2021 historical streamflow record. When the onsite storage basin was full, it was assumed that the pump diverting water from the river would stop pumping, and when the onsite storage basin was empty, it was assumed that no water would be pumped out. Then, the average of the outflow volume for each calendar day over the streamflow record was totaled to develop a total volume of stormwater diverted each year.

4.5.2 Groundwater Infiltration/Injection Diversion and Conveyance

The 2012 San Diego Recycled Water Study reviewed groundwater recharge opportunities in the context of indirect potable reuse. Evaluations of the groundwater basins were based upon the size, yield, and characteristics of the groundwater basins. These same groundwater basins can be considered as opportunities for stormwater use.

The capture volume was calculated in the same manner as the reservoir augmentation model (Model #1a). In lieu of discharge of water to a reservoir, water captured from a river could be infiltrated to the ground (see Model #2), and/or used as a supply for irrigation to offset the demand for potable water (like the Bolivar Park and Orange Memorial Park projects). As a sample project site, the team considered a large public park that is underlain by National Resource Conservation Service (NRCS) Hydrologic Group A soils, associated with high infiltration rates. The park was located east, away from urban areas, so a long conveyance system was required from the urban stormwater capture point. A steady infiltration rate of 0.8 inches per hour was assumed.

Following injection, the water would eventually be extracted for reuse. Extraction costs were included in the project cost; however, the cost of additional treatment and conveyance to a final use (such as to a customer or raw water pipeline) was excluded.

4.5.3 Aquifer Storage and Recovery (ASR) Considerations

The amount of water that is infiltrated or injected into the aquifer will be greater than the amount that can be recovered from the aquifer. An aquifer that meets all potable water supply standards with minimal treatment would require more pre-treatment prior to injection, but recovery would be significantly increased. Due to buoyancy effects, if the water stored in the aquifer is fresher than the connate groundwater (i.e., brackish), then the stored water may migrate to the upper portion of the storage zone and then expand laterally. When storing fresh water in a brackish aquifer, considerations must be made not to stress the well by over pumping at a point that may result in saline groundwater migrating to the upper freshwater storage lens. Transmissivity in the aquifer will inform how long the water can be stored before it is recovered; over time in highly transmissive aquifers, the freshwater may become difficult to extract.

Suitability of an aquifer for aquifer storage and recovery (ASR) is typically considered based upon the parameters in Table 4-8, based on general performance of ASR wells. These are general rules of thumb based upon the general performance of ASR wells and could be applied when siting a future project. Field and desktop studies investigating aquifer recharge (AR), demonstrating water quality,
hydraulic behavior of the groundwater with injection, and travel times with downstream extraction wells operating may be required to further develop this alternative. Assessing the suitability of groundwater aquifers for AR is outside the scope of this study, but has been the focus of other studies in the region (Refer to Table 2-2: Regional Stormwater Capture-Related Studies, Programs, and Incentives).

Table 4-8: Aquifer Parameters for ASR Project

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Suitable Range</th>
<th>Unsuitable Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dissolved Solids (mg/l)</td>
<td>&lt;7,000 (brackish)</td>
<td>N/A</td>
</tr>
<tr>
<td>Transmissivity (gal/day/ft)</td>
<td>5,000 to 200,000</td>
<td>&lt;5,000 or &gt;200,000</td>
</tr>
<tr>
<td>Leakance (1) (day⁻¹)</td>
<td>&lt;10⁻⁵</td>
<td>&gt;10⁻³</td>
</tr>
<tr>
<td>Effective Porosity</td>
<td>&gt;0.25</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Storage Zone Thickness (feet)</td>
<td>30 to 100</td>
<td>&lt;30 or &gt;100</td>
</tr>
</tbody>
</table>

(1) Leakance is the loss of stored water through upward or downward migration.

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5.0 Conclusion

5.1 Financial Evaluation

The unit costs and project costs per acre-ft per year from the County Stormwater Capture Study and other projects with similar components were reviewed prior to developing order of magnitude planning level project cost estimates.

A water supply costing tool\(^{26}\) (costing tool) was then used and adjusted to the San Diego region and to today’s dollars. The costing tool allows users to size and estimate planning-level costs for water infrastructure facilities (pump stations, water treatment plants, and transmission pipelines) to meet future water needs. It contains tools for modeling hydraulics, pumping energy and costs, and sizing a well field. It assists in the calculation of soft costs; including engineering, administration, environmental permitting, land acquisition and surveying, interest during construction, and legal costs; as well as estimated annual O&M costs. It also allows for incorporation of externally calculated costs if needed. Table 5-1 summarizes assumptions made when developing the financial evaluation.

Table 5-1: Assumptions for Financial Evaluation

<table>
<thead>
<tr>
<th>Model Component</th>
<th>Financial Evaluation Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflow/Outflow/Diversion Volume</td>
<td>Values for the rate of inflow, rate of outflow, and storage size were assumed for each model to develop a range of diversion volumes. After a sensitivity analysis, the values were adjusted as needed to optimize the model.</td>
</tr>
<tr>
<td>Storage</td>
<td>A variety of onsite storage sizes was assumed to develop a range of costs. A StormTrap underground storage system was used to cost the underground storage system, with the total costs for storage including the units, excavation, unit installation, stone base, backfill, and surface restoration. The StormTrap costs were interpolated from other similar projects based on storage volume.</td>
</tr>
<tr>
<td>Transmission Lines</td>
<td>Transmission line distances were assumed to be 5–6 miles with elevation increases of 400–500 feet for costing purposes, based on the assumption that water would be moved from west to east.</td>
</tr>
<tr>
<td>Parcel Sizes</td>
<td>Parcel sizes were determined based upon the minimum footprint needed for the components of the model (e.g., storage, treatment, pumping and well facilities). The footprint for the ASR groundwater injection option (Model #2b) is larger due to the regulatory requirements for the distance of monitoring wells, above-ground infrastructure that moves water into and out of the well, and the need for onsite pre- and post-treatment.</td>
</tr>
<tr>
<td>Extraction Costs</td>
<td>Model #2 only; Post-extraction treatment and conveyance to the final use are not included in the financial evaluations, with the assumption that this infrastructure would already be in place at the time of the project.</td>
</tr>
</tbody>
</table>

\(^{26}\) Originally developed for the Texas Water Development Board and adjusted for use in the San Diego Region.
5.2 Model Optimization and Sensitivity Analysis

Model optimization efforts confirmed that a larger annual volume of stormwater could be captured when targeting lower flows than higher flows, because the lower flows occur with greater regularity. These optimization efforts also revealed that onsite storage could be minimized, and the capture volume maximized, with a rate of outflow that matches the rate of inflow.

A summary of the sensitivity analysis that was conducted is provided in Table 5-2. During this analysis, the team explored different options which varied the rate of outflow, capture initiation threshold, and onsite storage size to arrive at the most cost-effective alternatives.

Capture initiation threshold refers to the minimum level of flow that must be in the river before water is diverted. The largest diversion volume (3,600 acre-ft per year) can be offered by the alternative considered in the Alternative 7, which would capture all flows in the river, up to the rate of outflow (5 MGD). This option was less efficient than Alternative 8, which can divert 3,340 acre-ft per year (only 260 acre-ft less than Alternative 7), using a fraction of the onsite storage. Minimization of onsite storage reduces the project footprint and project costs.

Table 5-2: Sensitivity Analysis for Diversion Volume Alternatives

<table>
<thead>
<tr>
<th>No.</th>
<th>Rate of Inflow</th>
<th>Capture Initiation Threshold</th>
<th>Rate of Outflow (MGD)</th>
<th>Storage (Acre-ft)</th>
<th>Annual Diversion Volume (Acre-Ft/Year)</th>
<th>Cost Model Developed</th>
<th>Diversion Volume / Rate of Outflow (acre-ft/year/MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≤100 MGD</td>
<td>none</td>
<td>100</td>
<td>0.5</td>
<td>13,100</td>
<td>N/A</td>
<td>131</td>
</tr>
<tr>
<td>2</td>
<td>≤60 MGD</td>
<td>none</td>
<td>60</td>
<td>0.5</td>
<td>11,070</td>
<td>N/A</td>
<td>185</td>
</tr>
<tr>
<td>3</td>
<td>≤40 MGD</td>
<td>none</td>
<td>40</td>
<td>0.5</td>
<td>9,400</td>
<td>N/A</td>
<td>235</td>
</tr>
<tr>
<td>4</td>
<td>≤20 MGD</td>
<td>none</td>
<td>20</td>
<td>0.5</td>
<td>6,960</td>
<td>N/A</td>
<td>348</td>
</tr>
<tr>
<td>5</td>
<td>≤10 MGD</td>
<td>none</td>
<td>10</td>
<td>0.5</td>
<td>4,960</td>
<td>N/A</td>
<td>496</td>
</tr>
<tr>
<td>6</td>
<td>≤5 MGD</td>
<td>none</td>
<td>5</td>
<td>50</td>
<td>3,710</td>
<td>Yes (Model #2a)</td>
<td>742</td>
</tr>
<tr>
<td>7</td>
<td>≤5 MGD</td>
<td>none</td>
<td>5</td>
<td>10</td>
<td>3,600</td>
<td>N/A</td>
<td>720</td>
</tr>
<tr>
<td>8</td>
<td>≤5 MGD</td>
<td>none</td>
<td>5</td>
<td>0.5</td>
<td>3,340</td>
<td>Yes (Model #1a/b)</td>
<td>668</td>
</tr>
<tr>
<td>9</td>
<td>≤1 MGD</td>
<td>none</td>
<td>1</td>
<td>0.5</td>
<td>1,010</td>
<td>N/A</td>
<td>1,010</td>
</tr>
<tr>
<td>10</td>
<td>2 cfs</td>
<td>&gt;4 cfs</td>
<td>1</td>
<td>10</td>
<td>620</td>
<td>Yes (Model #2a)</td>
<td>620</td>
</tr>
<tr>
<td>11</td>
<td>2 cfs</td>
<td>&gt;4 cfs</td>
<td>1</td>
<td>0.5</td>
<td>600</td>
<td>Yes (Model #1a/b)</td>
<td>600</td>
</tr>
<tr>
<td>12</td>
<td>2 cfs</td>
<td>&gt;4 cfs</td>
<td>0.5</td>
<td>10</td>
<td>320</td>
<td>N/A</td>
<td>640</td>
</tr>
<tr>
<td>13</td>
<td>2 cfs</td>
<td>&gt;4 cfs</td>
<td>0.5</td>
<td>0.5</td>
<td>300</td>
<td>N/A</td>
<td>600</td>
</tr>
<tr>
<td>14</td>
<td>5 cfs</td>
<td>&gt;10 cfs</td>
<td>1</td>
<td>10</td>
<td>420</td>
<td>N/A</td>
<td>420</td>
</tr>
</tbody>
</table>
The relationship between annual diversion volume and rate of outflow is represented in the last column of Table 5-2 as well as Figure 5-1. As the rate of outflow increases, so does the diversion volume, but there are diminishing returns at higher rates of outflow. The most efficient alternative in terms of diversion volume per rate of outflow is Alternative 9, above. Alternatives 1-9 assume that no minimum flow needs to be retained in the river downstream of the intake, representing the largest possible capture volumes. Alternatives No. 10 -14 assume that only a portion of the flows would be captured to retain baseflows in the river downstream of the intake.

Alternatives 6, 8, 10, and 11 were selected for cost model development. Though Alternative 8 is not as efficient as Alternative 9 with respect to the rate of outflow, there are many other significant costs associated with the project, including conveyance costs, so a greater diversion volume offers greater potential for a lower overall cost per acre-ft. Alternative 6 was selected for Model #2a, because 50 acre-ft of storage and a 5-acre infiltration surface area was necessary to infiltrate at a higher outflow rate of 5 MGD. Similarly, Alternative 10 was selected for Model #2a, because 10 acre-ft of storage and a 1-acre infiltration surface area was necessary to infiltrate at a lower outflow rate of 1 MGD.

The variability of flows also increases as the rate of outflow increases. Due to the variability of stormwater flows, the treatment plant and conveyance system would be empty much of the time at higher rates of outflow (84% empty over the course of the year at 60 MGD, compared to 10% empty at 1 MGD). Onsite storage can partially offset the variability of stormwater flows.

![Figure 5-1: Annual Diversion Volume and Rate of Outflow](image)

Figure 5-1 shows the discharge and volume out over time for Alternative 6 and is representative for all the alternatives analyzed. Water is most effectively captured between the months of December and April, when the stream flows are highest.
5.3 Project Cost Comparison

Table 5-3 provides a summary of the planning level estimated project capital costs, annual O&M costs, and the cost per acre-foot over a 25-year period using a present value formula. Appendix B includes cost summaries for each model that provide additional detail.

Table 5-3: Stormwater Capture Model Summary Planning Level Estimated Costs

<table>
<thead>
<tr>
<th>Model #</th>
<th>1a</th>
<th>1b</th>
<th>2a</th>
<th>2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge to Reservoir</td>
<td>Discharge to Raw Water Pipeline</td>
<td>Infiltration to Drinking Water Aquifer</td>
<td>Injection to Drinking Water Aquifer</td>
<td></td>
</tr>
<tr>
<td>Parcel Size</td>
<td>1 – 3 acres</td>
<td>1 – 3 acres</td>
<td>3 – 12 acres</td>
<td>&lt; 1 – 25 acres</td>
</tr>
<tr>
<td>Annual Diversion Volume (acre-ft per year)</td>
<td>600–3,340 acre-ft</td>
<td>600–3,340 acre-ft</td>
<td>620–3,710 acre-ft</td>
<td>600–3,340 acre-ft</td>
</tr>
<tr>
<td>Annual Project Yield (1) (acre-ft per year)</td>
<td>600–3,340 acre-ft</td>
<td>600–3,340 acre-ft</td>
<td>500–2,970 acre-ft</td>
<td>480–2,670 acre-ft</td>
</tr>
<tr>
<td>Project Capital Cost (in millions)</td>
<td>$38.9–$95.8</td>
<td>$35.9–$86.3</td>
<td>$44.7–$135.0</td>
<td>$44.3–$128.4</td>
</tr>
<tr>
<td>Annual Operations, Maintenance, and Energy Costs (in millions)</td>
<td>$1.1–$3.8</td>
<td>$1.1–$3.7</td>
<td>$1.1–$3.9</td>
<td>$1.5–$5.3</td>
</tr>
<tr>
<td>Cost Per Acre-Ft (25-year)</td>
<td>$48,000–$96,000</td>
<td>$44,000–$90,000</td>
<td>$68,000–$127,000</td>
<td>$81,000–$145,000</td>
</tr>
</tbody>
</table>

(1) For Models 2a and 2b, it is assumed that 80% of the volume injected could be extracted for beneficial use.
(2) Assumes an annual interest rate of 3.5%, and a project lifespan of 25 years.

Figure 5-2: Average Discharge and Volume Out (Alternative 6)
When calculating the cost per acre-ft for Model 2a and 2b, it was assumed that 80% of the flow diverted and stored in the aquifer could be recovered and reused. This is an optimistic assumption – recovery is more likely to fall in the range of 60-80% for a brackish aquifer.

### 5.4 Study Findings

As a result of the large treatment and conveyance costs associated with the models, the stormwater capture alternatives considered (Models #1 and #2) were found to be much more costly than other water supply sources, including imported water, indirect potable reuse, and desalination. Therefore, they are unlikely to be constructed with water supply as a primary project benefit. Instead, they could be considered within the context of MS4 compliance and water quality improvement.

Because the Water Authority does not own or operate an MS4, it does not have an NPDES permit for MS4 discharges and is not directly responsible for reduction of stormwater or removal of stormwater pollutants. The Water Authority also does not have jurisdiction over creeks, rivers, or groundwater basins in the San Diego region, and does not own the systems of conveyance or reservoirs that may be involved in a stormwater capture project. A stormwater capture project would therefore necessitate joint actions on the part of those local agencies having jurisdiction over these systems. Regional partnerships can help meet the objectives of multiple project drivers.
Appendix A

SDCWA Stormwater Capture Resource Log
<table>
<thead>
<tr>
<th>Year Completed</th>
<th>Name of Resource</th>
<th>Description of Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>Water Quality Control Plan for the San Diego Basin (1994)</td>
<td>The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters.</td>
</tr>
<tr>
<td>2004</td>
<td>Water Reuse Study</td>
<td>In January 2004, the San Diego City Council authorized a comprehensive evaluation of all viable options to maximize the usage of recycled water. The study also included analysis and research on the health effects of reuse options and a public participation process. Study Mission: To pursue opportunities to increase local water supply and reliability, and optimize local water assets, through a comprehensive study of recycled water.</td>
</tr>
<tr>
<td>2006</td>
<td>Chapter 6: Indirect Potable Reuse Opportunities of San Diego Recycled Water Study</td>
<td>This chapter describes the technical basis and foundation for developing the indirect potable reuse opportunities. In addition, this chapter also includes discussion on the potential for regulatory changes allowing direct potable reuse and how those changes could impact the indirect potable reuse opportunities.</td>
</tr>
<tr>
<td>2009</td>
<td>San Diego County Water Authority Reservoir Summary Report March 2009</td>
<td>The Reservoir Summary Report was prepared as part of the scope of work for the optimal Storage Study. The purpose of the study is to develop a storage strategy to optimize the utility of member agency reservoir facilities, and to identify system improvements and new storage projects needed to meet emergency water supply requirements.</td>
</tr>
<tr>
<td>2012</td>
<td>San Diego Recycled Water Study (Final Draft)</td>
<td>This Study is intended to serve as a guidance document in helping policy leaders make the important decisions ahead regarding water reuse and the region's water and wastewater infrastructure.</td>
</tr>
<tr>
<td>2012</td>
<td>Limnology and Reservoir Detention Study of San Vicente Reservoir</td>
<td>The Limnology and Reservoir Detention Study of San Vicente Reservoir is a component of the Water Purification Demonstration Project. The Limonology study employed a water quality model to evaluate hydrodynamic and water quality effects using purified water to augment San Vicente Reservoir.</td>
</tr>
<tr>
<td>2013</td>
<td>Water Purification Demonstration Project Report</td>
<td>Request for the City of San Diego to adopt the Water Purification Demonstration Project (as outlined the Project Report) in fulfillment of the elements outlined in Council actions approved in 2007 and 2008. These previous actions directed staff to conduct the Indirect Potable Resuse/Reservoir Augmentation Demonstration Project which evaluated feasibility of augmenting San Vicente Reservoir with treated purified water.</td>
</tr>
<tr>
<td>2013</td>
<td>Advanced Water Purification Facility Study Report</td>
<td>The Advanced Water Purification (AWP) Facility Study is a component of the Water Purification Demonstration Project. The AWP Study included design, install, operation, and testing of a one MGD demonstration facility located at North City Water Reclamation Plant, and a conceptual design and cost estimate for a potential full-scale facility.</td>
</tr>
<tr>
<td>2014</td>
<td>Los Angeles Basin Stormwater Conservation Study</td>
<td>The LA Basin Study is assessing the region's major water conservation and flood risk mitigation infrastructure to prepare for future drivers that may impact water supply, such as changes to climate and population.</td>
</tr>
<tr>
<td>N/A</td>
<td>San Diego Association of Governments (SANDAG) Open Data Website</td>
<td>Publicly-available GIS data for the San Diego Region.</td>
</tr>
<tr>
<td>2015</td>
<td>San Diego County Sustainable Groundwater Management (SGMA)</td>
<td>In September 2014, Governor Brown signed into law the Sustainable Groundwater Management Act (SGMA), which provides a framework to regulate groundwater for the first time in California's history. SGMA became effective January 1, 2015. The intent of the law is to strengthen local groundwater management of basins most critical to the state's water needs with an understanding that groundwater is most effectively managed at the local level.</td>
</tr>
<tr>
<td>Year Completed</td>
<td>Name of Resource</td>
<td>Description of Resource</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2015</td>
<td>Project Alternatives Report for Pure Water Oceanside (2015)</td>
<td>Purpose of this TM is to document the development of the indirect potable reuse (IPR) project alternatives. City of Oceanside is investigating IPR to enhance water supply reliability by recharging the Mission Groundwater Basin using water treated at San Luis Rey Water Reclamation Facility.</td>
</tr>
<tr>
<td>2015</td>
<td>SDCWA Urban Water Management Plan (2015)</td>
<td>Aiming to prevent supply disruptions, encourage long term planning and promote water conservation, the State of California established the Urban Water Management Planning Act of 1983, later amended by the Water Conservation Act of 2009 (SB X7-7). Administered by the California Department of Water Resources (DWR), water suppliers are required to develop an Urban Water Management Plan (UWMP) and update their plan on a five-year cycle. Not only are UWMPs developed to meet regulatory requirements, but they also serve as an overarching water resources planning document for a water district's residents, businesses, interest groups, and public officials. The UWMPs generally provide information on a water district's current and future water demands and supplies, water resources challenges, and summarize the major water resources initiatives proactively taken to ensure a safe, reliable water supply for its customers. (From 2018 SD Region SCFS)</td>
</tr>
<tr>
<td>2015</td>
<td>National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region</td>
<td>Order by the California Regional Water Quality Control Board for San Diego Region, discusses findings and provisions.</td>
</tr>
<tr>
<td>2016</td>
<td>San Diego Watershed Basin Study: Water Supply and Demand projections Interim Report</td>
<td>The purpose of the San Diego Basin Study (Basin Study) is to determine potential climate change impacts on water supplies and demands within the San Diego region. The intention of Task 2.1 is the characterization of existing and projected water supply and demand within the Study Area.</td>
</tr>
<tr>
<td>2016</td>
<td>Pure Water San Diego Final Program EIR</td>
<td>EIR for Pure Water San Diego - advanced water purification to produce potable water from recycled water, consisting of new water and wastewater treatment facilities, pump stations, transmission lines, and pipelines.</td>
</tr>
<tr>
<td>2017</td>
<td>Assessing the Potential for Stormwater Capture and Use, Water Reliability Coalition and San Diego Regional Chamber (2017)</td>
<td>This project is intended to enhance awareness and understanding regarding the opportunities and challenges for stormwater capture and use as a sustainable water supply source.</td>
</tr>
<tr>
<td>2017</td>
<td>San Diego Region Functionally Equivalent Storm Water Resource Plan, Prepared for San Diego Region Copermittees and the County of San Diego Public Works (June 2017)</td>
<td>The purpose of the SWRP is to identify and prioritize projects to “bring to the top” those multi-benefit projects that can best meet the identified priorities on a watershed basis. Outcome of plan is to provide the guidance and tools to support the region in developing more competitive projects for state-wide grant funding opportunities to achieve watershed and regional planning goals.</td>
</tr>
<tr>
<td>2018</td>
<td>San Diego Region Stormwater Capture and Use Feasibility Study (SWCFS), County of San Diego (2018)</td>
<td>The San Diego Region Stormwater Capture and Use Feasibility Study (SWCFS) is designed to provide a regional analysis of the feasibility of planning, constructing, operating, and managing facilities that capture and use stormwater for supply, restoring hydrology, irrigation, conservation, and other beneficial uses.</td>
</tr>
<tr>
<td>2018</td>
<td>San Diego County Rain Barrel Capacity Study, San Diego State University (2018)</td>
<td>The purpose of the San Diego County Rain Barrel research project is to help determine the rate of public uptake of rain barrels within San Diego County using various mapping and computer programs.</td>
</tr>
<tr>
<td>Year Completed</td>
<td>Name of Resource</td>
<td>Description of Resource</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>2018</td>
<td>San Diego County Stormwater Capture Feasibility Study for Industrial Properties, San Diego State University (2018)</td>
<td>The main goal of this analysis is to 1) determine the scope of the industrial facilities in the county; 2) map the location and type of these facilities; 3) quantify the amount of stormwater runoff that can be prevented with the introduction of 2017 General Permit amendment, and 4) provide background for future studies.</td>
</tr>
<tr>
<td>2018</td>
<td>Mission Valley Groundwater Feasibility Study 2018 Summary Report</td>
<td>The City of San Diego had conducted the Mission Valley Groundwater Feasibility Study 2018 to assess the feasibility and costs of a project to develop Mission Valley Basin groundwater as a sustainable source of supply for the City’s residents.</td>
</tr>
<tr>
<td>2018</td>
<td>San Diego Basin Study</td>
<td>A 50-50 cost share partnership between the City of San Diego Public Utilities Department (SDPUD) and the Bureau of Reclamation (Reclamation). The purpose of the study is to assess the region’s water supply and demand and determine the potential effects from climate change impacts within the San Diego Integrated Regional Water Management (IRWM) planning region; and analyze the region’s existing infrastructure and develop adaptation strategies that can assist with addressing the uncertainties associated with climate change. The study will also focus on optimizing the region’s sub-basin infrastructure and reservoir systems and further the development of potential new water supply sources through detailed scientific, engineering, and economic analyses.</td>
</tr>
<tr>
<td>2018</td>
<td>San Diego River Valley Groundwater Basin Water Supply Yield- Summary Memorandum</td>
<td>This technical memorandum summarizes info from the three previous technical memorandums as follows: TM 1, Evaluation of Water Supply Projects. TM 1 provides a coarse-screening review of opportunities to develop the Basin for municipal water supply and storage operations, and recommends prioritized categories of projects distinguished by implementation timeframes and other factors. TM 2, Water Resources Setting and Groundwater Quality. TM 2 describes the Basin’s water resource setting and provides an overview of potential water quality challenges. TM 3, Water Supply Yield Implementation. TM3 provides details about a proposed implementation plan to develop new groundwater supply, storage, and monitoring projects in the Basin.</td>
</tr>
<tr>
<td>2018</td>
<td>Stormwater Capture, Southern California Water Coalition 2018 Whitepaper Update</td>
<td>The purpose of this 2018 whitepaper update is to gain a better understanding of actual stormwater runoff capture volumes, costs, benefits, and project performance across the region to inform future discussions. This whitepaper augments prior efforts and uses the most recent and best available stormwater project data.</td>
</tr>
<tr>
<td>2019</td>
<td>Innovations in Stormwater Capture, Southern California Water Coalition 2019 White Paper</td>
<td>The purpose of this white paper is to provide examples from projects describing innovations in implementation of stormwater projects related to enhanced O&amp;M strategies and best management practices (BMPs), alternative delivery options, multi-agency collaboration, and workforce development. The overall goal is to gather information and lessons learned from other local, regional, and national stormwater projects to benefit Southern California Water Coalition (SCWC) agencies.</td>
</tr>
<tr>
<td>2019</td>
<td>San Diego Integrated Regional Water Management Plan, City of San Diego, County of San Diego, and San Diego County Water Authority (2019)</td>
<td>This planning study is aimed at identifying water management projects in the San Diego Region that can help develop long-term water supply, improve water quality, and protect natural resources. The plan helps the Region pursue future Proposition 1 funding opportunities. Local studies (SWRP and others) are incorporated into the IRWM.</td>
</tr>
<tr>
<td>2019</td>
<td>North City Pure Water Project Draft Title 22 Engineering Report</td>
<td>The North City Pure Water Project is the first phase of the City of San Diego's Pure Water Program. The Project is designed to augment Miramar Reservoir, which is a source of domestic drinking water supply, with purified water produced at the future North City Pure Water Facility. This Title 22 Engineering Report describes the City’s plan for compliance with the California Code of Regulations (CCR) Title 22 Water Recycling Criteria, including Surface Water Augmentation regulations (CCR, 2017, in progress). This report is prepared in fulfillment with the State Water Resources Control Board Division of Drinking Water requirements.</td>
</tr>
<tr>
<td>Year Completed</td>
<td>Name of Resource</td>
<td>Description of Resource</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>2020</td>
<td>River Oaks Stormwater Capture Project Planning Study, City of San Jose (2020)</td>
<td>This planning study report provides an overview of the development of conceptual designs for the River Oaks Stormwater Capture Project (the project) in the City of San José (the City). The River Oaks Stormwater Capture Project will capture and treat stormwater and dry weather runoff from a 344-acre drainage area in the River Oaks community.</td>
</tr>
<tr>
<td>2020</td>
<td>Contributed Funds Agreement (No. R21CF35003) Between City of San Diego and The Bureau of Reclamation, department of the interior for the forecast informed reservoir operations study</td>
<td>This project involves use of stormwater forecasting to inform reservoir storage. The Contributed Funds Agreement gives the purpose to provide funding for reclamation while also discussing the scope of work/services and funding for the project.</td>
</tr>
<tr>
<td>2020</td>
<td>2020 Water Shortage Contingency Plan</td>
<td>This Water Shortage Contingency Plan provides background on the water shortage contingency plan, gives plan preparation and re-evaluation, historic drought response and shortage management action, annual municipal and industrial water reliability analysis, regional shortage response actions and levels, extraordinary demand reduction measures, municipal and industrial supply allocation methodology, catastrophic water shortage, communication plan, and implementation.</td>
</tr>
<tr>
<td>2020</td>
<td>2020 Recycled Water Master Plan</td>
<td>This document describes the City’s existing recycled water system and baseline demands; describes the City’s recycled water supply sources and the impact of the City’s Pure Water Program on availability of supply; describes opportunities to add recycled water customers in the future; describes the feasibility of expanding the recycled water system in the future; provides an implementation plan for optimization and expansion of the City’s recycled water system.</td>
</tr>
<tr>
<td>2021</td>
<td>SDCWA Water Supply Contingency Plan (May 2021)</td>
<td>Water Supply Contingency Plan. While the region has plans to provide a high level of water reliability, there will always be some level of uncertainty associated with maintaining and developing local and imported supplies.</td>
</tr>
<tr>
<td>N/A</td>
<td>STORMS website (Strategy to Optimize Resource Management of Stormwater)</td>
<td>STORMS’ mission is to lead the evolution of Stormwater management in California by advancing the perspective that Stormwater is a valuable resource, supporting policies for collaborative watershed-level Stormwater management and pollution prevention, removing obstacles to funding, developing resources, and integrating regulatory and non-regulatory interests.</td>
</tr>
<tr>
<td>N/A</td>
<td>Mission Valley Groundwater Aquifer</td>
<td>Overview of the Mission Valley Groundwater Aquifer contamination and cleanup efforts. Describes City of SD’s pueblo rights, which include water rights to ther San Diego River. Pueblo water rights are the highest priority rights, superior to both overlying (riparian) and appropriative rights, and according to the court, extend to those waters of the San Diego River and its tributary water supplies necessary to support the growth of the City. Pueblo rights extend to all native flows of the San Diego River, including groundwater supplies that contribute to the flow of the river and its tributaries, as well as excessive or flood-level flows. Furthermore, the City’s Pueblo right is not subject to claims of prescriptive rights from other users and is not forfeited by lack of use.</td>
</tr>
<tr>
<td>N/A</td>
<td>Mission Valley Groundwater Aquifer</td>
<td>This document provides an overview of the history, geology, pueblo water rights, and grand jury report 2013 in relation to the Mission Valley Groundwater Aquifer. It also discusses the Aquifer's contamination and clean up status: its contamination chronology, spill prevention, control, and countermeasure plan (SPCC), barrier containment, and regional water quality control board oversight documents. And lastly, the document provides information of the water supply development, including the conceptual project, field investigations, and model development.</td>
</tr>
</tbody>
</table>
Appendix B

Model Cost Summaries
## Estimated Costs for Facilities

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimated Costs for Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAPITAL COST</strong></td>
<td></td>
</tr>
<tr>
<td>Intake (1.4 MGD) with channel dam for diversion</td>
<td>$3,590,000</td>
</tr>
<tr>
<td>Primary Pump Stations (1-46 HP)</td>
<td>$1,100,000</td>
</tr>
<tr>
<td>Transmission Pipeline (Pipe #1 - 12 inch - 1000 ft Urban Rock, 200 psi; Pipe #2 - 12 inch - 31000 ft Urban Rock, 350 psi)</td>
<td>$8,860,000</td>
</tr>
<tr>
<td>Transmission Pump Station(s) (1-197 HP)</td>
<td>$1,550,000</td>
</tr>
<tr>
<td>Storage Tanks (StormTrap - 0.5 ac-ft, Single Trap 5’ High)</td>
<td>$340,000</td>
</tr>
<tr>
<td>Water Treatment Plant - Conventional Treatment (1 MGD)</td>
<td>$7,440,000</td>
</tr>
<tr>
<td><strong>TOTAL COST OF FACILITIES</strong></td>
<td>$22,880,000</td>
</tr>
<tr>
<td><strong>Engineering and Feasibility Studies, Legal Assistance, Financing, Bond Counsel, and Contingencies (60%)</strong></td>
<td>$14,690,000</td>
</tr>
<tr>
<td><strong>Environmental &amp; Archaeology Studies and Mitigation</strong></td>
<td>$540,000</td>
</tr>
<tr>
<td><strong>Land Acquisition and Surveying (12 acres, including Pipeline ROW)</strong></td>
<td>$830,000</td>
</tr>
<tr>
<td><strong>TOTAL COST OF PROJECT</strong></td>
<td>$38,940,000</td>
</tr>
<tr>
<td><strong>ANNUAL COST</strong></td>
<td></td>
</tr>
<tr>
<td>Operation and Maintenance</td>
<td></td>
</tr>
<tr>
<td>Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities)</td>
<td>$92,000</td>
</tr>
<tr>
<td>Intakes and Pump Stations (2.5% of Cost of Facilities)</td>
<td>$144,000</td>
</tr>
<tr>
<td>Dam and Reservoir (1.5% of Cost of Facilities)</td>
<td>$7,500</td>
</tr>
<tr>
<td>Water Treatment Plant O&amp;M (10% of Cost of Facilities)</td>
<td>$744,000</td>
</tr>
<tr>
<td>Pumping Energy Costs (1,439,600 kW-hr @ $0.08/kW-hr)</td>
<td>$115,000</td>
</tr>
<tr>
<td><strong>TOTAL ANNUAL O&amp;M AND ENERGY COST</strong></td>
<td>$1,102,500</td>
</tr>
</tbody>
</table>

**Available Project Yield (acft/yr)**: 600

**25-Year Cost of Water ($ per acft)**: $96,000
### Estimated Costs for Facilities

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intake (5.3 MGD) with channel dam for diversion</td>
<td>$5,840,000</td>
</tr>
<tr>
<td>Primary Pump Stations (1-178HP)</td>
<td>$1,510,000</td>
</tr>
<tr>
<td>Transmission Pipeline (Pipe #1 - 18 inch - 1000 ft Urban Rock, 150 psi; Pipe #2 - 20 inch - 31000 ft Urban Rock, 350 psi)</td>
<td>$15,940,000</td>
</tr>
<tr>
<td>Transmission Pump Station(s) (1-1,026 HP)</td>
<td>$7,640,000</td>
</tr>
<tr>
<td>Storage Tanks (StormTrap - 0.5 ac-ft, Single Trap 5’ High)</td>
<td>$340,000</td>
</tr>
<tr>
<td>Water Treatment Plant - Conventional Treatment (5 MGD)</td>
<td>$26,650,000</td>
</tr>
<tr>
<td><strong>TOTAL COST OF FACILITIES</strong></td>
<td><strong>$57,920,000</strong></td>
</tr>
</tbody>
</table>

- Engineering and Feasibility Studies, Legal Assistance, Financing, Bond Counsel, and Contingencies (60%) $35,710,000
- Environmental & Archaeology Studies and Mitigation $900,000
- Land Acquisition and Surveying (14 acres, including Pipeline ROW) $1,270,000

**TOTAL COST OF PROJECT** $95,800,000

### ANNUAL COST

- Operation and Maintenance
  - Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities) $163,000
  - Intakes and Pump Stations (2.5% of Cost of Facilities) $362,000
  - Dam and Reservoir (1.5% of Cost of Facilities) $7,500
  - Water Treatment Plant O&M (10% of Cost of Facilities) $2,665,000
  - Pumping Energy Costs (7,167,000 kW-hr @ $0.08/kW-hr) $573,000

**TOTAL ANNUAL O&M AND ENERGY COST** $3,770,500

### Available Project Yield (acft/yr)

- 3,340

### 25-Year Cost of Water ($ per acft)

- $48,000
### Planning-Level Costs

**Stormwater Capture Model #1: Reservoir Supplementation - Discharge to Raw Water Pipeline (Smaller Diversion)**

**Urban Stormwater Capture for Water Supply Feasibility Assessment**

**San Diego County Water Authority**

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimated Costs for Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAPITAL COST</strong></td>
<td></td>
</tr>
<tr>
<td>Intake (1.4 MGD) with channel dam for diversion</td>
<td>$4,180,000</td>
</tr>
<tr>
<td>Primary Pump Stations (1- 46 HP)</td>
<td>$1,150,000</td>
</tr>
<tr>
<td>Transmission Pipeline (Pipe #1 - 12 inch - 1000 ft Urban Rock, 150 psi; Pipe #2 - 12 inch - 25000 ft Urban Rock, 300 psi)</td>
<td>$6,560,000</td>
</tr>
<tr>
<td>Transmission Pump Station(s) (1- 166 HP)</td>
<td>$1,460,000</td>
</tr>
<tr>
<td>Storage Tanks (StormTrap - 0.5 ac-ft, Single Trap 5' High)</td>
<td>$340,000</td>
</tr>
<tr>
<td>Water Treatment Plant - Conventional Treatment (1 MGD)</td>
<td>$7,440,000</td>
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<tr>
<td><strong>TOTAL COST OF FACILITIES</strong></td>
<td>$21,130,000</td>
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<td>Engineering and Feasibility Studies, Legal Assistance, Financing, Bond Counsel, and Contingencies (60%)</td>
<td>$13,650,000</td>
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<tr>
<td>Environmental &amp; Archaeology Studies and Mitigation</td>
<td>$390,000</td>
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<tr>
<td>Land Acquisition and Surveying (10 acres, including Pipeline ROW)</td>
<td>$710,000</td>
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<td><strong>TOTAL COST OF PROJECT</strong></td>
<td>$35,880,000</td>
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</table>

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>ANNUAL COST</strong></td>
<td></td>
</tr>
<tr>
<td>Operation and Maintenance</td>
<td></td>
</tr>
<tr>
<td>Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities)</td>
<td>$69,000</td>
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<td>Intakes and Pump Stations (2.5% of Cost of Facilities)</td>
<td>$158,000</td>
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<td>Dam and Reservoir (1.5% of Cost of Facilities)</td>
<td>$7,500</td>
</tr>
<tr>
<td>Water Treatment Plant O&amp;M (10% of Cost of Facilities)</td>
<td>$744,000</td>
</tr>
<tr>
<td>Pumping Energy Costs (1,252,200 kW-hr @ $0.08/kW-hr)</td>
<td>$100,000</td>
</tr>
<tr>
<td><strong>TOTAL ANNUAL O&amp;M AND ENERGY COST</strong></td>
<td>$1,078,500</td>
</tr>
</tbody>
</table>

| Available Project Yield (acft/yr) | 600 |
| 25-Year Cost of Water ($ per acft) | $90,000 |
### Planning-Level Costs

*Stormwater Capture Model #1: Reservoir Supplementation - Discharge to Raw Water Pipeline (Larger Diversion)*  
*Urban Stormwater Capture for Water Supply Feasibility Assessment*

*San Diego County Water Authority*

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimated Costs for Facilities</th>
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<tbody>
<tr>
<td><strong>CAPITAL COST</strong></td>
<td></td>
</tr>
<tr>
<td>Intake (5.3 MGD) with channel dam for diversion</td>
<td>$5,840,000</td>
</tr>
<tr>
<td>Primary Pump Stations (1-178HP)</td>
<td>$1,510,000</td>
</tr>
<tr>
<td>Transmission Pipeline (Pipe #1 - 18 inch - 1000 ft Urban Rock, 150 psi; Pipe #2 - 18 inch - 25000 ft Urban Rock, 300 psi)</td>
<td>$10,540,000</td>
</tr>
<tr>
<td>Transmission Pump Station(s) (1- 964 HP)</td>
<td>$7,200,000</td>
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<tr>
<td>Storage Tanks (StormTrap - 0.5 ac-ft, Single Trap 5' High)</td>
<td>$340,000</td>
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<tr>
<td>Water Treatment Plant - Conventional Treatment (5 MGD)</td>
<td>$26,650,000</td>
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<tr>
<td><strong>TOTAL COST OF FACILITIES</strong></td>
<td>$52,080,000</td>
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<tr>
<td>Engineering and Feasibility Studies, Legal Assistance, Financing, Bond Counsel, and Contingencies (60%)</td>
<td>$32,220,000</td>
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<td>Environmental &amp; Archaeology Studies and Mitigation</td>
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<tr>
<td>Land Acquisition and Surveying (12 acres, including Pipeline ROW)</td>
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<td><strong>TOTAL COST OF PROJECT</strong></td>
<td>$86,310,000</td>
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<td><strong>ANNUAL COST</strong></td>
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<tr>
<td>Operation and Maintenance</td>
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</tr>
<tr>
<td>- Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities)</td>
<td>$109,000</td>
</tr>
<tr>
<td>- Intakes and Pump Stations (2.5% of Cost of Facilities)</td>
<td>$351,000</td>
</tr>
<tr>
<td>- Dam and Reservoir (1.5% of Cost of Facilities)</td>
<td>$7,500</td>
</tr>
<tr>
<td>- Water Treatment Plant O&amp;M (10% of Cost of Facilities)</td>
<td>$2,665,000</td>
</tr>
<tr>
<td>- Pumping Energy Costs (6,739,800 kW-hr @ $0.08/kW-hr)</td>
<td>$539,000</td>
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<tr>
<td><strong>TOTAL ANNUAL O&amp;M AND ENERGY COST</strong></td>
<td>$3,671,500</td>
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<tr>
<td><strong>Available Project Yield (acft/yr)</strong></td>
<td>3,340</td>
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<tr>
<td><strong>25-Year Cost of Water ($ per acft)</strong></td>
<td>$44,000</td>
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</table>
### Estimated Costs for Facilities

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAPITAL COST</strong></td>
<td></td>
</tr>
<tr>
<td>Intake (1.4 MGD) with channel dam for diversion</td>
<td>$3,590,000</td>
</tr>
<tr>
<td>Primary Pump Stations (1-46 HP)</td>
<td>$1,100,000</td>
</tr>
<tr>
<td>Transmission Pipeline (Pipe #1 - 12 inch - 1000 ft Urban Rock, 150 psi; Pipe #2 - 12 inch-25000 ft Urban Rock, 300 psi)</td>
<td>$6,560,000</td>
</tr>
<tr>
<td>Transmission Pump Station(s) (1-166 HP)</td>
<td>$1,460,000</td>
</tr>
<tr>
<td>Well Fields (3 - 200 gpm Wells, Pumps, and Piping)</td>
<td>$750,000</td>
</tr>
<tr>
<td>Storage Tanks (StormTrap - 10.0 ac-ft, Single Trap 5' High)</td>
<td>$5,260,000</td>
</tr>
<tr>
<td>Water Treatment Plant - Conventional Treatment (1 MGD)</td>
<td>$7,440,000</td>
</tr>
<tr>
<td><strong>TOTAL COST OF FACILITIES</strong></td>
<td>$26,160,000</td>
</tr>
<tr>
<td>Engineering and Feasibility Studies, Legal Assistance, Financing, Bond Counsel, and Contingencies (60%)</td>
<td>$15,696,000</td>
</tr>
<tr>
<td>Environmental &amp; Archaeology Studies and Mitigation</td>
<td>$1,160,000</td>
</tr>
<tr>
<td>Land Acquisition and Surveying (14 acres, including Pipeline ROW)</td>
<td>$1,640,000</td>
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<tr>
<td><strong>TOTAL COST OF PROJECT</strong></td>
<td>$44,656,000</td>
</tr>
<tr>
<td><strong>ANNUAL COST</strong></td>
<td></td>
</tr>
<tr>
<td>Operation and Maintenance</td>
<td></td>
</tr>
<tr>
<td>Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities)</td>
<td>$126,000</td>
</tr>
<tr>
<td>Intakes and Pump Stations (2.5% of Cost of Facilities)</td>
<td>$154,000</td>
</tr>
<tr>
<td>Dam and Reservoir (1.5% of Cost of Facilities)</td>
<td>$7,500</td>
</tr>
<tr>
<td>Water Treatment Plant O&amp;M (10% of Cost of Facilities)</td>
<td>$744,000</td>
</tr>
<tr>
<td>Pumping Energy Costs (1,252,200 kW-hr @ $0.08/kW-hr)</td>
<td>$100,000</td>
</tr>
<tr>
<td><strong>TOTAL ANNUAL O&amp;M AND ENERGY COST</strong></td>
<td>$1,131,500</td>
</tr>
<tr>
<td>Available Project Yield (acft/yr) - Assumes 80% of Diversion</td>
<td>500</td>
</tr>
<tr>
<td>25-Year Cost of Water ($ per acft)</td>
<td>$127,000</td>
</tr>
</tbody>
</table>
### Planning-Level Costs

**Stormwater Capture Model #2: Infiltration to Drinking Water Aquifer (Larger Diversion)**

**Urban Stormwater Capture for Water Supply Feasibility Assessment**

San Diego County Water Authority

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimated Costs for Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAPITAL COST</strong></td>
<td></td>
</tr>
<tr>
<td>Intake (5.3 MGD) with channel dam for diversion</td>
<td>$5,840,000</td>
</tr>
<tr>
<td>Primary Pump Stations (1- 178 HP)</td>
<td>$1,510,000</td>
</tr>
<tr>
<td>Transmission Pipeline (Pipe #1 - 18 inch - 1000 ft Urban Rock, 150 psi; Pipe #2 - 18 inch-25000 ft Urban Rock, 300 psi)</td>
<td>$10,540,000</td>
</tr>
<tr>
<td>Transmission Pump Station(s) (1-928 HP)</td>
<td>$6,940,000</td>
</tr>
<tr>
<td>Well Fields (5 - 500 gpm Wells, Pumps, and Piping)</td>
<td>$2,030,000</td>
</tr>
<tr>
<td>Storage Tanks (StormTrap - 50.0 ac-ft, Single Trap 5’ High)</td>
<td>$25,610,000</td>
</tr>
<tr>
<td>Water Treatment Plant - Conventional Treatment (5 MGD)</td>
<td>$26,650,000</td>
</tr>
<tr>
<td><strong>TOTAL COST OF FACILITIES</strong></td>
<td>$79,120,000</td>
</tr>
</tbody>
</table>

- Engineering and Feasibility Studies, Legal Assistance, Financing, Bond Counsel, and Contingencies (60%) | $47,472,000 |
- Environmental & Archaeology Studies and Mitigation | $5,230,000 |
- Land Acquisition and Surveying (21 acres, including Pipeline ROW) | $3,220,000 |
| **TOTAL COST OF PROJECT** | $135,042,000 |

#### ANNUAL COST

- Operation and Maintenance
  - Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities) | $382,000 |
  - Intakes and Pump Stations (2.5% of Cost of Facilities) | $357,000 |
  - Dam and Reservoir (1.5% of Cost of Facilities) | $7,500 |
  - Water Treatment Plant O&M (10% of Cost of Facilities) | $2,665,000 |
  - Pumping Energy Costs (6,533,800 kW-hr @ $0.08/kW-hr) | $523,000 |
| **TOTAL ANNUAL O&M AND ENERGY COST** | $3,934,500 |

- Available Project Yield (acft/yr) - Assumes 80% of Diversion | 2,970 |
- 25-Year Cost of Water ($ per acft) | $68,000 |

---

**Note:** The costs are based on detailed planning and feasibility studies, and are subject to change based on further analysis and refinement.
### Estimated Costs for Facilities

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intake (1.05 MGD) with channel dam for diversion</td>
<td>$3,400,000</td>
</tr>
<tr>
<td>Primary Pump Stations (1- 35 HP)</td>
<td>$1,130,000</td>
</tr>
<tr>
<td>Transmission Pipeline (Pipe #1 - 12 inch - 1000 ft Urban Rock, 150 psi; Pipe #2 - 12 inch-25000 ft Urban Rock, 300 psi)</td>
<td>$6,560,000</td>
</tr>
<tr>
<td>Transmission Pump Station(s) (1-166 HP)</td>
<td>$1,460,000</td>
</tr>
<tr>
<td>Well Fields (1 - 400 gpm ASR Well, Pumps, and Piping)</td>
<td>$670,000</td>
</tr>
<tr>
<td>Water Treatment Plant - Advanced Treatment (1.0 MGD)</td>
<td>$11,840,000</td>
</tr>
</tbody>
</table>

**TOTAL COST OF FACILITIES** $27,010,000

- Engineering and Feasibility Studies, Legal Assistance, Financing, Bond Counsel, and Contingencies (60%) $16,206,000
- Environmental & Archaeology Studies and Mitigation $400,000
- Land Acquisition and Surveying (10 acres, including Pipeline ROW) $730,000

**TOTAL COST OF PROJECT** $44,346,000

### ANNUAL COST

- **Operation and Maintenance**
  - Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities) $94,000
  - Intakes and Pump Stations (2.5% of Cost of Facilities) $150,000
  - Dam and Reservoir (1.5% of Cost of Facilities) $7,500
  - Water Treatment Plant O&M (10% of Cost of Facilities) $1,184,000
  - Pumping Energy Costs (1,194,368 kW-hr @ $0.08/kW-hr) $96,000

**TOTAL ANNUAL O&M AND ENERGY COST** $1,531,500

- **Available Project Yield (acft/yr) - Assumes 80% of Diversion** 480
- **25-Year Cost of Water ($ per acft)** $145,000
# Planning-Level Costs

**Stormwater Capture Model #2: Injection to Drinking Water Aquifer (Larger Diversion)**

*Urban Stormwater Capture for Water Supply Feasibility Assessment*

San Diego County Water Authority

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>CAPITAL COST</strong></td>
<td></td>
</tr>
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<td>Intake (5.3 MGD) with channel dam for diversion</td>
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</tr>
<tr>
<td>Primary Pump Stations (1 - 178 HP)</td>
<td>$1,510,000</td>
</tr>
<tr>
<td>Transmission Pipeline (Pipe #1 - 18 inch - 1000 ft Urban Rock, 150 psi; Pipe #2 - 18 inch - 25000 ft Urban Rock, 300 psi)</td>
<td>$10,540,000</td>
</tr>
<tr>
<td>Transmission Pump Station(s) (1-928 HP)</td>
<td>$6,940,000</td>
</tr>
<tr>
<td>Well Fields (5 - 600 gpm ASR Wells, Pumps, and Piping)</td>
<td>$3,510,000</td>
</tr>
<tr>
<td>Water Treatment Plant - Advanced Treatment (5.0 MGD)</td>
<td>$42,260,000</td>
</tr>
<tr>
<td><strong>TOTAL COST OF FACILITIES</strong></td>
<td>$72,550,000</td>
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<tr>
<td>Engineering and Feasibility Studies, Legal Assistance, Financing, Bond Counsel, and Contingencies (60%)</td>
<td>$43,530,000</td>
</tr>
<tr>
<td>Environmental &amp; Archaeology Studies and Mitigation</td>
<td>$6,190,000</td>
</tr>
<tr>
<td>Land Acquisition and Surveying (34 acres, including Pipeline ROW)</td>
<td>$6,080,000</td>
</tr>
<tr>
<td><strong>TOTAL COST OF PROJECT</strong></td>
<td>$128,350,000</td>
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<tr>
<td><strong>ANNUAL COST</strong></td>
<td></td>
</tr>
<tr>
<td>Operation and Maintenance</td>
<td></td>
</tr>
<tr>
<td>Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities)</td>
<td>$140,000</td>
</tr>
<tr>
<td>Intakes and Pump Stations (2.5% of Cost of Facilities)</td>
<td>$357,000</td>
</tr>
<tr>
<td>Dam and Reservoir (1.5% of Cost of Facilities)</td>
<td>$7,500</td>
</tr>
<tr>
<td>Water Treatment Plant O&amp;M (10% of Cost of Facilities)</td>
<td>$4,226,000</td>
</tr>
<tr>
<td>Pumping Energy Costs (6,533,800 kW-hr @ $0.08/kW-hr)</td>
<td>$523,000</td>
</tr>
<tr>
<td><strong>TOTAL ANNUAL O&amp;M AND ENERGY COST</strong></td>
<td>$5,253,500</td>
</tr>
<tr>
<td>Available Project Yield (acft/yr) - Assumes 80% of Diversion</td>
<td>2,670</td>
</tr>
<tr>
<td>25-Year Cost of Water ($ per acft)</td>
<td>$81,000</td>
</tr>
</tbody>
</table>
Update on Microplastics Regulation Development. (Presentation)

Purpose
Provide an update on efforts to regulate microplastics in drinking water in California.

Executive Summary
- Senate Bill 1422 requires the State Water Resources Control Board (State Board) to develop standard testing methods, reporting requirements, and public notification on microplastics in drinking water by July 1, 2021.
- An international effort is underway to develop standard testing methods for microplastics.
- Standard methods are needed in order to collect and compare occurrence data.
- Current knowledge is insufficient to establish regulatory health thresholds for microplastics.
- Additional research is needed to understand if there are human health impacts from microplastics in drinking water.

Background
California Senate Bill (SB) 1422 (Portantino, 2018) added section 116376 to the Health and Safety Code, which requires the State Board to adopt a definition of microplastics in drinking water by July 1, 2021. It also requires the State Board by July 1, 2021:
- adopt a standard methodology for testing microplastics in drinking water;
- adopt requirements for four years of testing and reporting, including public disclosure;
- consider issuing health-based guidelines to aid the public in interpreting testing results; and
- accredit qualified laboratories in California to analyze microplastics in drinking water.

In a parallel effort, California SB 1263 (Portantino, 2018) requires the Ocean Protection Council (OPC) to adopt and implement a Statewide Microplastics Strategy to protect ocean health. The OPC must submit the strategy to the legislature by December 31, 2021, and report back by December 31, 2025.

Discussion
The State Board was the first regulatory agency in the world to define microplastics in drinking water on June 16, 2020, as required by SB 1422. In adopting its definition, the State Board acknowledged that standardized methods don’t yet exist to detect microplastics in drinking...
water, and that information about exposure and possible health impacts to humans is limited and rapidly evolving.

To gather information in response to SB 1422 and SB 1263, the State Board is collaborating with the Southern California Coastal Water Research Program (SCCWRP) to lead an international effort to standardize methods for monitoring microplastics in drinking water, surface water, sediment, and fish tissue. This ongoing effort includes participation from the Metropolitan Water District of Southern California to compare different methods. Standard data collection and analysis methods are needed to meaningfully evaluate and compare data.

The State Board is also working with SCCWRP on a joint project to bring together science experts to evaluate potential health effects of microplastics and the feasibility of developing health-based thresholds. The project kicked off with a series of webinars that began in October 2020 with participation from regulatory agencies, environmental organizations, and water and wastewater agencies. On September 8, 2021, microplastics experts reported on their findings and concluded that current knowledge is inadequate to develop a health-based regulatory level such as a drinking water standard or notification level. State Board staff is considering a phased monitoring approach for drinking water using screening levels that are not associated with known human health impacts.

The Association of California Water Agencies (ACWA) has established a microplastics workgroup that is closely following regulatory developments and engaging with State Board staff. It is chaired by Water Authority staff and includes member agency participation. The workgroup jointly developed a coalition letter sent to the State Board on June 30, 2021, which emphasized the need for adequate time to develop standard methods and for research on health impacts of microplastics in drinking water (attached). The lack of standard testing methods and limited science about health impacts requires a thoughtful and common-sense approach to regulation development.

Prepared by: Lesley Dobalian, Principal Water Resources Specialist
Reviewed by: Elizabeth Lovsted, Water Resources Manager
Kelley Gage, Director of Water Resources
Approved by: Dan Denham, Deputy General Manager

Attachment
June 30, 2021

The Honorable E. Joaquin Esquivel, Chair
State Water Resources Control Board
1001 I Street
Sacramento, California 95814

Subject: Deadline for Activities Related to Microplastics in Drinking Water

Dear Chair Esquivel,

The California-Nevada Section of the American Water Works Association (CA-NV AWWA), the Association of the California Water Agencies (ACWA) and the California Municipal Utilities Association (CMUA) appreciate the efforts of the State Water Resources Control Board’s (Board) Division of Drinking Water (DDW) to meet the requirements of Health and Safety Code (HSC) Section 116376 (SB 1422) - which requires the Board to take several actions related to microplastics in drinking water by July 1, 2021. CA-NV AWWA represents water professionals and water systems throughout California who are dedicated to providing safe and clean drinking water and are directly engaged in nearly all aspects of the water treatment and supply process. ACWA represents over 460 public water agencies that deliver approximately 90 percent of the water used for residential, commercial and agricultural purposes in California. CMUA represents over 50 public water agencies serving water to over 70 percent of Californians.

The Board’s activities required under HSC 116376 will be the first of its kind in the world to proactively address microplastics in drinking water. The importance of doing it correctly, rather than rapidly, cannot be overstated. We recognize that the Board has a statutory deadline of July 1, 2021, but it is essential that the methodologies and monitoring requirements related to microplastics are developed effectively and are based on the best available science. Therefore, we offer the following comment.

Due to the complexity of the important work, CA-NV AWWA, ACWA and CMUA believe that additional time and effort, beyond July 1, 2021, is required to fully develop and prudently deploy the methodologies and monitoring requirements for microplastics in drinking water.

Although the laboratories working on this issue were closed for several months during the pandemic, CA-NV AWWA, ACWA and CMUA appreciate the work conducted thus far including workshops with the Board staff in coordination with the Southern California Coastal Water Research Project (SCCWRP). SCCWRP has identified a number of suitable analytical methods to characterize microplastics in water, but the information obtained is not yet sufficient to fully meet all of the requirements of HSC 116376 that are due by July 1, 2021. The analytical methods currently available to characterize microplastics in

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1 HSC Section 116376 (SB 1422) requires the Board, on or before July 1, 2021 to:
(1) Adopt a standard methodology to be used in the testing of drinking water for microplastics.
(2) Adopt requirements for four years of testing and reporting of microplastics in drinking water, including public disclosure of those results.
(3) If appropriate, consider issuing a notification level or other guidance to aid consumer interpretations of the results of the testing required.
(4) Accredit qualified laboratories in California to analyse microplastics.
drinking water are either not used by water systems or are not used regularly, and therefore, the monitoring efforts will have to rely on contract laboratories, which can provide several logistical and capacity challenges. The costs for these still-to-be-determined analytical methods also are unknown and unlikely to be included in water systems’ budgets approved to begin Fiscal Year 2021 or even 2022. Further, these available methods are not yet accredited by the Environmental Laboratory Accreditation Program (ELAP), thereby delaying efforts by water systems and their laboratories to undertake any microplastic monitoring that may be required by the Board until the ELAP approval process is completed.

In addition, the health effects associated with microplastics are still unclear and information available from the literature is inconsistent. Most studies were obtained from environments other than drinking water. Moreover, information about the impact of microplastics in drinking water specifically to human health is still extremely limited. While we anticipate future efforts will shed more light on health effects of microplastics in drinking water, information is lacking to allow the Board to develop a Notification Level or similar guidance. We encourage the Board to refrain from enforcing public notification requirements until there is adequate research and data to factually and meaningfully construct the human impacts of microplastics in drinking water.

We thank you for considering our recommendation to take the time needed to finalize the implementation of HSC 116376 and we welcome the opportunity to discuss our comments further.

Sincerely,

Sue Mosburg
Executive Director
CA-NV AWWA

Nick Blair
Regulatory Advocate
ACWA

Andrea Abergel
Senior Regulatory Advocate
CMUA

cc Dorene D’Adamo, Vice Chair, State Water Resources Control Board
Nichole Morgan, Board Member, State Water Resources Control Board
Sean Maguire, Board Member, State Water Resources Control Board
Laurel Firestone, Board Member, State Water Resources Control Board
The Honorable Anthony Portantino, California State Senate
Darren Polhemus, Deputy Director, Division of Drinking Water
Robert Brownwood, Assistant Deputy Director, Division of Drinking Water
Randy Barnard, Technical Operations Section, Division of Drinking Water
Melissa Hall, Regulatory Development Unit, Division of Drinking Water
Scott Coffin, Regulatory Development Unit, Division of Drinking Water
September 15, 2021

Attention: Water Planning and Environmental Committee

Water Resources Report

Purpose
This report includes the following:

- Water Year 2021 Rainfall Totals for October 2020 through August 2021
- Fiscal Year 2022 Monthly Water Authority Sales to Member Agencies
- Monthly Member Agency Water Use for August 2021 (Exhibit A)
- Monthly Reservoir Storage Levels for August 2021 (Exhibit B)

**Water Year 2021 Rainfall Totals**
* (Inches)
October 2020 – August 2021

<table>
<thead>
<tr>
<th>Location</th>
<th>Actual</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramona</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henshaw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuyamaca</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lindbergh Field</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


**Fiscal Year 2022 Monthly Water Authority Sales to Member Agencies (Acre-Feet)**

<table>
<thead>
<tr>
<th>Month</th>
<th>FY 2021</th>
<th>FY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug</td>
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<tr>
<td>Sep</td>
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<td></td>
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<tr>
<td>Oct</td>
<td></td>
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<tr>
<td>Nov</td>
<td></td>
<td></td>
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<tr>
<td>Dec</td>
<td></td>
<td></td>
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<tr>
<td>Jan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
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<tr>
<td>Jun</td>
<td></td>
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</table>
### Estimated Member Agency Water Use (AF)
##### August 2021

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Water Authority Source</th>
<th>QSA/Seawater Desal/MWD</th>
<th>Surface Water</th>
<th>Groundwater</th>
<th>Recycled Water</th>
<th>San Luis Rey Water Transfers</th>
<th>Seawater Desalination</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td></td>
<td>1,291</td>
<td>-</td>
<td>-</td>
<td>505</td>
<td>-</td>
<td>208</td>
<td>2,004</td>
</tr>
<tr>
<td>Del Mar, City of</td>
<td></td>
<td>N/R</td>
<td>-</td>
<td>-</td>
<td>N/R</td>
<td>-</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
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<td></td>
<td>2,362</td>
<td>-</td>
<td>-</td>
<td>74</td>
<td>32</td>
<td>2,468</td>
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<tr>
<td>Fallbrook P.U.D.</td>
<td></td>
<td>907</td>
<td>-</td>
<td>8</td>
<td>48</td>
<td>-</td>
<td>-</td>
<td>963</td>
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<tr>
<td>Helix W.D.</td>
<td></td>
<td>2,907</td>
<td>89</td>
<td>7</td>
<td>-</td>
<td>-</td>
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<td>3,002</td>
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<tr>
<td>Lakeside W.D.</td>
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<td>334</td>
<td>-</td>
<td>34</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>368</td>
</tr>
<tr>
<td>National City, City of 3</td>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>-</td>
<td>-</td>
<td>N/R</td>
<td></td>
</tr>
<tr>
<td>Oceanside, City of 3</td>
<td></td>
<td>2,245</td>
<td>-</td>
<td>191</td>
<td>69</td>
<td>-</td>
<td>-</td>
<td>2,504</td>
</tr>
<tr>
<td>Oceanside, City of 3</td>
<td></td>
<td>2,064</td>
<td>-</td>
<td>-</td>
<td>400</td>
<td>-</td>
<td>-</td>
<td>2,464</td>
</tr>
<tr>
<td>Otay W.D.</td>
<td></td>
<td>3,060</td>
<td>-</td>
<td>-</td>
<td>N/R</td>
<td>-</td>
<td>-</td>
<td>3,060</td>
</tr>
<tr>
<td>Padre Dam M.W.D.</td>
<td></td>
<td>1,036</td>
<td>-</td>
<td>-</td>
<td>104</td>
<td>-</td>
<td>-</td>
<td>1,140</td>
</tr>
<tr>
<td>Pendleton M. R. 4</td>
<td></td>
<td>17</td>
<td>N/R</td>
<td>-</td>
<td>45</td>
<td>-</td>
<td>-</td>
<td>62</td>
</tr>
<tr>
<td>Poway, City of</td>
<td></td>
<td>1,064</td>
<td>-</td>
<td>-</td>
<td>63</td>
<td>-</td>
<td>-</td>
<td>1,127</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td></td>
<td>1,943</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,943</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td></td>
<td>484</td>
<td>-</td>
<td>-</td>
<td>73</td>
<td>-</td>
<td>-</td>
<td>558</td>
</tr>
<tr>
<td>Rincon Del Diablo M.W.D.</td>
<td></td>
<td>550</td>
<td>-</td>
<td>-</td>
<td>266</td>
<td>-</td>
<td>-</td>
<td>815</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td></td>
<td>15,816</td>
<td>543</td>
<td>53</td>
<td>N/R</td>
<td>-</td>
<td>-</td>
<td>16,413</td>
</tr>
<tr>
<td>San Dieguito W.D.</td>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>-</td>
<td>N/R</td>
<td>-</td>
<td>N/R</td>
<td></td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td></td>
<td>1,006</td>
<td>126</td>
<td>83</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,215</td>
</tr>
<tr>
<td>South Bay I.D. 3</td>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>-</td>
<td>-</td>
<td>N/R</td>
<td></td>
</tr>
<tr>
<td>Vallecitos W.D.</td>
<td></td>
<td>1,369</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>292</td>
<td>1,661</td>
<td></td>
</tr>
<tr>
<td>Valley Center M.W.D. 5</td>
<td></td>
<td>2,105</td>
<td>-</td>
<td>N/R</td>
<td>-</td>
<td>N/R</td>
<td>N/R</td>
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<tr>
<td>Vista I.D.</td>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>-</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td></td>
<td>739</td>
<td>-</td>
<td>687</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,426</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>41,298</strong></td>
<td><strong>758</strong></td>
<td><strong>981</strong></td>
<td><strong>1,730</strong></td>
<td><strong>32</strong></td>
<td><strong>500</strong></td>
<td><strong>45,298</strong></td>
</tr>
</tbody>
</table>

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1 SLR water transfers were added as local supply sources beginning in December 2017, for Escondido and Vista I.D. only; Valley Center began in September 2019.
2 De Luz figures included in Fallbrook P.U.D. totals.
3 Brackish groundwater figures are included in groundwater figures.
4 Pendleton M.C.B. imported use includes South Coast Water District deliveries.
5 Valley Center’s recycled use is reported biannually.
6 N/R = Not Reported
## Reservoir Storage (AF)
### August 2021

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Reservoir</th>
<th>Capacity</th>
<th>Storage</th>
<th>% of Capacity</th>
<th>Change From Previous Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>Maerkle</td>
<td>600</td>
<td>59</td>
<td>10%</td>
<td>34</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>Dixon</td>
<td>2,606</td>
<td>2,433</td>
<td>93%</td>
<td>(55)</td>
</tr>
<tr>
<td></td>
<td>Wohlford</td>
<td>2,783</td>
<td>2,114</td>
<td>76%</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td><strong>5,389</strong></td>
<td><strong>4,547</strong></td>
<td><strong>84%</strong></td>
<td><strong>31</strong></td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>Red Mountain</td>
<td>1,335</td>
<td>313</td>
<td>23%</td>
<td>61</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>Cuyamaca</td>
<td>8,195</td>
<td>607</td>
<td>7%</td>
<td>(69)</td>
</tr>
<tr>
<td></td>
<td>Jennings</td>
<td>9,790</td>
<td>7,780</td>
<td>79%</td>
<td>(218)</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td><strong>17,985</strong></td>
<td><strong>15,587</strong></td>
<td><strong>87%</strong></td>
<td><strong>286</strong></td>
</tr>
<tr>
<td>Poway, City of</td>
<td>Poway</td>
<td>3,432</td>
<td>3,066</td>
<td>90%</td>
<td>87</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>Morro Hill</td>
<td>465</td>
<td>156</td>
<td>34%</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Ramona</td>
<td>12,000</td>
<td>1,314</td>
<td>11%</td>
<td>0</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>Barrett</td>
<td>34,806</td>
<td>19,165</td>
<td>55%</td>
<td>(375)</td>
</tr>
<tr>
<td></td>
<td>El Capitan</td>
<td>112,807</td>
<td>28,851</td>
<td>26%</td>
<td>(521)</td>
</tr>
<tr>
<td></td>
<td>Hodges</td>
<td>4,652</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td></td>
<td>Lower Otay</td>
<td>47,067</td>
<td>32,850</td>
<td>70%</td>
<td>(896)</td>
</tr>
<tr>
<td></td>
<td>Miramar</td>
<td>6,682</td>
<td>5,692</td>
<td>85%</td>
<td>(132)</td>
</tr>
<tr>
<td></td>
<td>Morena</td>
<td>50,694</td>
<td>4,627</td>
<td>9%</td>
<td>(305)</td>
</tr>
<tr>
<td></td>
<td>Murray</td>
<td>4,684</td>
<td>4,075</td>
<td>87%</td>
<td>(69)</td>
</tr>
<tr>
<td></td>
<td>San Vicente</td>
<td>91,695</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td></td>
<td>Sutherland</td>
<td>29,508</td>
<td>10,363</td>
<td>35%</td>
<td>(201)</td>
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<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td><strong>382,595</strong></td>
<td><strong>105,623</strong></td>
<td><strong>28%</strong></td>
<td><strong>(2,498)</strong></td>
</tr>
<tr>
<td>San Dieguito WD / Santa Fe I.D</td>
<td>San Dieguito</td>
<td>883</td>
<td>561</td>
<td>64%</td>
<td>(132)</td>
</tr>
<tr>
<td>Sweetwater Authority</td>
<td>Loveland</td>
<td>25,400</td>
<td>7,710</td>
<td>30%</td>
<td>(132)</td>
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<tr>
<td></td>
<td>Sweetwater</td>
<td>28,079</td>
<td>8,853</td>
<td>32%</td>
<td>(1,085)</td>
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<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td><strong>53,479</strong></td>
<td><strong>16,563</strong></td>
<td><strong>31%</strong></td>
<td><strong>(1,207)</strong></td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>Turner</td>
<td>1,612</td>
<td>1,025</td>
<td>64%</td>
<td>(408)</td>
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<tr>
<td>Vista I.D.</td>
<td>Henshaw</td>
<td>51,774</td>
<td>3,829</td>
<td>7%</td>
<td>(21)</td>
</tr>
<tr>
<td><strong>Member Agency Totals</strong></td>
<td></td>
<td><strong>531,549</strong></td>
<td><strong>145,444</strong></td>
<td><strong>27%</strong></td>
<td><strong>(4,378)</strong></td>
</tr>
<tr>
<td>Water Authority</td>
<td>Olivenhain</td>
<td>24,774</td>
<td>18,711</td>
<td>76%</td>
<td>1,616</td>
</tr>
<tr>
<td></td>
<td>Hodges</td>
<td>8,749</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
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<td></td>
<td>San Vicente - Comprised of:</td>
<td></td>
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<td></td>
<td></td>
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<tr>
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<td>San Vicente Emergency</td>
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<td>N/R</td>
<td>N/R</td>
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<td>San Vicente Carryover</td>
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<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
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<tr>
<td></td>
<td>San Vicente Operating</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td><strong>191,186</strong></td>
<td><strong>18,711</strong></td>
<td><strong>10%</strong></td>
<td><strong>1,616</strong></td>
</tr>
<tr>
<td>Water Authority Storage Accounts</td>
<td>El Capitan</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lower Otay</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td></td>
<td>Sweetwater (Temporary)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Water Authority Totals</strong></td>
<td></td>
<td><strong>191,186</strong></td>
<td><strong>18,711</strong></td>
<td><strong>10%</strong></td>
<td><strong>1,616</strong></td>
</tr>
<tr>
<td><strong>Total Water in Storage</strong></td>
<td></td>
<td><strong>722,735</strong></td>
<td><strong>164,155</strong></td>
<td><strong>23%</strong></td>
<td><strong>(2,762)</strong></td>
</tr>
<tr>
<td>Metropolitan Water District</td>
<td>Skinner</td>
<td>44,264</td>
<td>37,241</td>
<td>84%</td>
<td>(1,202)</td>
</tr>
<tr>
<td></td>
<td>Diamond Valley</td>
<td>810,000</td>
<td>631,251</td>
<td>78%</td>
<td>(13,501)</td>
</tr>
<tr>
<td></td>
<td>Oroville</td>
<td>3,537,577</td>
<td>799,527</td>
<td>23%</td>
<td>(92,472)</td>
</tr>
<tr>
<td><strong>State Water Project</strong></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Water in Storage</strong></td>
<td></td>
<td><strong>4,391,841</strong></td>
<td><strong>1,468,019</strong></td>
<td><strong>33%</strong></td>
<td><strong>(107,175)</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. Revised capacity volume accounts for lowered reservoir level at Lake Wohlford due to DWR Division of Safety of Dams safety issues.
3. Revised capacity volume accounts for lowered reservoir level at Lake Hodges due to DWR Division of Safety of Dams safety issues and are in accordance with the 1998 Emergency Storage Project Agreement for the Joint Use of Lake Hodges Dam and Reservoir.
4. Includes City of San Diego’s supply and storage obligations to California American Mutual (Cal-Am) Water Company and San Dieguito W.D./Santa Fe I.D.
5. Includes allocated and unallocated water in Lake Henshaw.
6. Water Authority carryover, emergency, and operating pools in San Vicente Reservoir were established in June 2015. City of San Diego presently states total capacity in San Vicente Vicente at 249,358 AF, with the Water Authority portion being 157,663 AF and the remaining capacity, 91,695 AF, allocable to the City of San Diego.
7. N/R= Not Reported; values being reconciled by the City of San Diego.
8. No defined capacities for storage accounts in El Capitan, Lower Otay and Sweetwater Authority reservoirs.

PUBLIC COMMENT MAY BE SUBMITTED BY EITHER OF THESE TWO METHODS:

1. BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, SUBMIT YOUR TELEPHONE NUMBER BY E-MAIL TO THE CLERK AT MNELSON@SDCWA.ORG AND THE CLERK WILL CALL YOU WHEN THE BOARD IS READY TO HEAR YOUR PUBLIC COMMENT (THREE MINUTES OR LESS); OR

2. BEFORE THE MEETING, OR BEFORE PUBLIC COMMENT CLOSES AT THE MEETING, E-MAIL YOUR COMMENT TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG, AND TIME ALLOWING IT MAY BE READ ALOUD AT THE PUBLIC COMMENT PERIOD (THREE-MINUTE LIMIT).

IF MODIFICATIONS OR ACCOMMODATIONS FROM INDIVIDUALS WITH DISABILITIES ARE REQUIRED, SUCH PERSONS SHOULD PROVIDE A REQUEST AT LEAST 24 HOURS IN ADVANCE OF THE MEETING BY E-MAIL TO THE WATER AUTHORITY GENERAL COUNSEL AT MHATTAM@SDCWA.ORG]

REVISED AGENDA
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.

SEPTEMBER 23, 2021
1:00 p.m.

1. Call to Order.

2. Roll call, determination of quorum.
   2-A Report on proxies received.

3. Additions to Agenda. (Government code Sec. 54954.2(b)).

4. Approve the minutes of the Special Administrative and Finance Committee meeting of August 12, 2021 and the minutes of the Formal Board of Directors’ meeting of August 26, 2021.
5. Opportunity for members of the public who wish to address the Board on matters within the Board’s jurisdiction.

6. PRESENTATIONS AND PUBLIC HEARINGS

6-A Presentation of Directors’ Service Awards. Gary Croucher

6-B Service appreciation for MWD Delegate Mike Hogan. Gary Croucher

7. REPORT BY CHAIRS

7-A Chair’s Report: Chair Croucher

7-B Report of Committee Actions
Administrative and Finance Committee
Imported Water Committee
Legislation and Public Outreach Committee
Engineering and Operations Committee
Water Planning and Environmental Committee

8. CONSENT CALENDAR

Note and file the Treasurer’s report.

8.2 Agreement with Oracle USA, Inc. to renew the Enterprise Resource Planning System software annual maintenance and support agreements.
Authorize the General Manager to renew the Enterprise Resource Planning System software annual maintenance and support agreements with Oracle USA, Inc. for two years at a total cost of $623,274.35.

8.3 Adopt the Water Authority’s 2021 Long-Range Financing Plan.
Adopt the Water Authority’s 2021 Long-Range Financing Plan.

8.4 Reimbursement Agreement with City of Poway for design of the new treated water connection and Poway 5 Flow Control Facility.
Authorize the General Manager, or designee, to execute the design reimbursement agreement with the City of Poway for supporting the new treated water connection and Poway 5 Flow Control Facility.

8.5 Contract with Southwest Valve & Equipment, Inc. to purchase butterfly valves.
Authorize the General Manager, or designee, to award a contract to Southwest Valve & Equipment, Inc. to purchase two 72-inch butterfly valves in the amount of $646,868.75 for the Pipeline 5 Relining from Twin Oaks Valley Road to Crossover Pipeline Turnout project.

9. SPECIAL REPORTS
9-A GENERAL MANAGER’S REPORT – Ms. Kerl
9-B GENERAL COUNSEL’S REPORT – Mr. Hattam
9-C SANDAG REPORT – Director Katz
SANDAG Subcommittees:
– Borders Committee – Director Saxod
– Regional Planning Committee – Director Boyle
9-D AB 1234 Compliance Reports – Directors

10. ACTION / DISCUSSION / INFORMATION

10-A Detachment Update. (Discussion) (Supplemental Materials) Sandy Kerl /
Mark Hattam

10-B Governor’s Order for holding Board Meetings virtually. (Discussion) Sandy Kerl /
(Supplemental Materials) Mark Hattam

11. CLOSED SESSION(S)

11-A Conference with Legal Counsel – Existing Litigation Government Code §54956.9(d)(1)
SDCWA v. Metropolitan Water District of Southern California; San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466; CPF-14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350; CPF-18-516389; California Court of Appeal (1st District) Case Nos. A146901; A148266; A154325; A161144; A162168; California Supreme Court Case Nos. S243500; and S251025

11-B Conference with Real Property Negotiator
Government Code §54956.8
Property: QSA Portion of Colorado River Water
Agency Negotiators: Sandra Kerl, Dan Denham, Scott Slater
Negotiating Parties: San Diego County Water Authority, Colorado River water users
Under Negotiations: Terms and Price

11-C Conference with Legal Counsel – Anticipated Litigation
Government Code §54956.9(d)(2)
One Case

11-D Public Employee Employment
Government Code §54957 - Title: General Counsel

Conference with Labor Negotiators, Government Code §54957.6
Designated Board Representatives: Chair, Vice-Chair, Secretary
Unrepresented Employee: General Counsel

12. ACTION FOLLOWING CLOSED SESSION
13. **OTHER COMMUNICATIONS**

14. **ADJOURNMENT**

**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.

Melinda Nelson
Clerk of the Board
CALL TO ORDER / ROLL CALL

Chair Miller called the Administrative and Finance Committee meeting to order at 1:30 p.m. Committee members present were Chair Miller, Vice Chair Wilson*, and Directors Arant, Boyle, Hilliker, Hurst, Katz, Kennedy, Madaffer, and Thorner. Directors absent were Vice Chair Ayala, and Directors Abdullahi, Cate, Croucher, and Hall. Also, present were Directors Bebee, Elitharp, Fong-Sakai, Heidemann, Hogan, Lewinger, McMillan, Macedo, Murtland, Reeh, Saxod, and Smith. 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 Kerl, General Counsel Hattam, Deputy General Manager Denham, Assistant General Manager Berge, Director of Finance/Treasurer Harris, and Budget and Treasury Manager Whyte. Other staff present were Director of Water Resources Gage, Rate and Debt Manager Rossum, Director of Engineering Bousquet, Director of the Colorado River Program Rodgers, Director of Administrative Services Foster, Director of Operations and Maintenance Fisher, Director of Public Affairs Vedder, Director of MWD Program Chen, Director of Human Resources Kite, and Principal Engineer Shoaf.

ADDITIONS TO AGENDA

There were no additions to the agenda.

PUBLIC COMMENT

There were no members of the public who wished to speak.

ACTION/DISCUSSION

2021 Long-Range Financing Plan Workshop.

Chair Miller began with reviewing workshop logistics. He stated the workshop was conducted in a virtual setting to help protect everyone’s health during the Coronavirus outbreak. He reviewed the agenda and outlined discussion topics.

Ms. Whyte began with an overview of the Long-Range Financing Plan. She reviewed how it directed all financial activities, and how the LRFP provides key financial information. She discussed LRFP contents, 2021 LRFP Update, general shared assumptions, CIP spending assumptions, water sales demand assumptions, 2021 LRFP policy considerations for Debt Service Coverage, Debt/PAYGO and ratings, and LRFP meeting schedule.

*Vice Chair Wilson arrived at 1:44 p.m.
Ms. Harris gave an update on Financial Advisor Guidance including how metrics influence credit ratings, Financial Advisor analytic framework, results, conclusions and next steps, and key takeaways for Board consideration.

Ms. Kerl advised the Board there was no action needed at that time. She announced a second workshop was scheduled for Thursday, August 19, 2021, should the Board decide they need more information. She stated the Recommended 2021 Long-Range Financing Plan would be presented at the August Board meeting, and consideration for adoption of the Recommended 2021 LRFP was scheduled for September 23, 2021.

Mr. Shoaf provided a presentation on the Capital Improvement Program (CIP). He covered CIP Budget/LRFP Development primary assumptions, LRFP/CIP development, deferred 18 Projects, significant projects included in the Multi-Year Plan, CIP planning options, and approved CIP Multi-Year spending plan.

Mr. Rossum presented the development of scenarios including general shared assumptions, High-Low rate sensitivity analysis, funding scenario alternatives, potential debt issues over the 10-year period, LRFP High-Low All-In Rate Forecast, High-Low reflects sensitivity to key variables, LRFP Key Financial Metrics – Bookend Debt, High-Low IAC reflects impacts to fixed costs, how other funding mixes compare, and Rate increase schedule by scenario.

Directors requested a review of including or excluding Lake Hodges in the 10-year CIP forecast. Directors also requested reviewing financial metrics such as PAYGO versus debt.

Ms. Harris concluded by reviewing next steps, and funding scenario alternatives. She announced a second LRFP workshop was scheduled for August 19, 2021, if needed. She presented the staff recommendation that would be presented and considered on September 23, 2021, and stated additional meetings with Water Authority staff were available by Member Agency request.

The Board asked several questions and made comments related to the Long-Range Financing Plan and funding source options.

**ADJOURNMENT**

Chair Miller asked Board members if they wanted to proceed with the scheduled August 19, 2021, LRFP workshop. The Board decided the second workshop was not needed. There being no further business to come before the Administrative and Finance Committee, Chair Miller adjourned the meeting at 3:25 p.m.
MINUTES OF THE FORMAL BOARD OF DIRECTORS' MEETING
AUGUST 26, 2021

ADMINISTRATIVE AND FINANCE COMMITTEE
CALL TO ORDER / ROLL CALL
Chair Miller called the Administrative and Finance Committee meeting to order at 9:00 a.m. Committee members present were Chair Miller, Vice Chairs Ayala* and Wilson, and Directors Abdullahi, Arant, Boyle, Cate, Croucher, Hall, Hilliker, Hurst, Katz, Kennedy, Madaffer, and Thorner. 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 Kerl, Deputy General Manager Denham, Assistant General Manager Berge, General Counsel Hattam, Director of Finance/Treasurer Harris, Director of Administrative Services Foster, Director of Operations and Maintenance Fisher, Rate and Debt Manager Rossum, Budget and Treasury Manager Whyte, Controller Woidzik, Human Resources Director Kite, Director of the Colorado River Program Rodgers, and Clerk of the Board Nelson.

ADDITIONS TO AGENDA
There were no additions to the agenda.

PUBLIC COMMENT
There were no members of the public who wished to speak.

* Director Ayala arrived at 9:02 a.m.

CHAIR’S REPORT
Chair Miller reported that the Water Authority received the Annual Achievement of Excellence in Procurement Award from the National Procurement Institute for the eighth consecutive year. The award recognized public and non-profit organizations based on innovation, professionalism, e-procurement, productivity, and leadership attributes within the procurement function. He congratulated Water Authority’s purchasing staff for earning the award.

DIRECTORS’ COMMENTS
There were no Directors’ comments.

I. CONSENT CALENDAR
   Staff recommendation: Note and file the Treasurer’s report.
2. **Resolution establishing amount due from the city of San Diego for the In-Lieu Charge as a condition of providing water service for Fiscal Year 2022.**
   Staff recommendation: Adopt Resolution 2021-19 establishing an amount due of $2,601,556.11 from the City of San Diego for the In-Lieu charge for Fiscal Year 2022.

3. **Amendment to Professional Services Contract with Ace Janitorial Services, Inc. for Routine Janitorial Services.**
   Staff recommendation: Approve an amendment to the professional services contract with Ace Janitorial Services, Inc. for continued janitorial services to the Water Authority through August 31, 2022, for a period of 12 additional months, and increasing total contract funding by $78,600, to an amount not to exceed $157,200.

4. **Approve Capacity Fee Refund to CornerStone Communities.**
   Staff recommendation: Authorize the General Manager to issue a capacity charges refund in the amount of $154,500 to CornerStone Communities.

   Vice Chair Ayala moved, Director Katz seconded and the motion to approve staffs’ recommendations passed unanimously. Director Cate recused on Consent Calendar item 2.

II. **ACTION/DISCUSSION/PRESENTATION**

1. **Financial Strategy Work Group Update.**

   Chair Hilliker presented a summary of topics covered during the July 30 Financial Strategy Work Group meeting including a Long-Range Financing Plan overview, Financial Advisor guidance, forecasted Capital Improvement Program, Water Demand Forecast (High/Low), draft LRFP walkthrough, LRFP scenario development, Board input, and next steps. The LRFP meeting schedule was reviewed, and Chair Hilliker announced the next Financial Strategy Work Group meeting was scheduled for August 27, 2021.

2. **Recommended 2021 Long-Range Financing Plan.**

   Ms. Harris began the Draft 2021 Long-Range Financing Plan (LRFP) presentation by reviewing the agenda. Mr. Fisher continued with a LRFP review and follow up items. He covered Water Authority current operations, various agreements related to Lake Hodges to include Emergency Storage Project Agreement (1998), City of San Diego/District Agreement (2014), and SDG&E Power Purchase Agreement (2004), dam safety concerns, funding opportunities, and other considerations.

   Mr. Rossum presented High-Low Rate Development of the Long-Range Financing Plan. He reviewed recommended High/Low All-In Rate forecast, MWD rate adjustments, MWD rate increases, sales sensitivity based on probabilistic modeling, High-Low rate sensitivity analysis, High-Low IAC impacts to fixed costs, LRFP impact on Lake Hodges, impact of rating on
borrowing costs, impact of ratings on SDCWA Bond issuances, CIP funding mix, and High/Low rate forecast inputs.

Ms. Whyte provided an overview of the Recommended Long-Range Financing Plan. She reviewed the LRFP meeting schedule, 2021 recommended LRFP highlights, forecasting exclusions, LRFP contents, key considerations, and 2021 LRFP recommendations.

Ms. Harris concluded by reviewing next steps and noted that the Recommended 2021 Long-Range Financing Plan would be considered for adoption by the Board on September 23, 2021. She walked through the Financial Strategy Work Group Work Plan that would address multiple requested items following adoption of the Long-Range Financing Plan.

Directors asked questions and staff provided answers. Directors thanked staff for their hard work on the 2021 Long-Range Financing Plan. Future meetings between City finance staff and San Diego County Water Authority staff were to be scheduled.

Director Serrano stated the City of San Diego would submit recommended amendments and associated actions to ensure both the financial health of the Water Authority, as well as preserve ratepayer affordability. Staff stated they would follow up to address the submitted recommendations by the City of San Diego.

3. Values Discovery Project.

Ms. Kerl began the presentation on the Values Discovery Project and noted it was a follow up to her presentation to the Board in June 2021. She explained the project came as a result of the employee engagement survey, with an objective to define the agency’s core values and ensure they were more congruent with a culture that embraced the human element of our work together, while maintaining our commitment to excellence. She explained that following survey completion, a team of frontline employees were assembled, and they met with 25% of employees, at all levels and departments, to engage in a structured thematic analysis process. She stated they finalized outcomes and shared them with the organization in July 2021. She then introduced Ms. Rodgers, the executive lead for the project.

Ms. Rodgers reviewed the purpose of the Values Discovery Team (VDT). She covered the appreciative inquiry approach the team took to gather information for the project. She shared the names and departments of the VDT members and stated a total of 59 interviews were completed by the team and included staff at all levels across the agency. Several VDT members presented the seven new organizational values and related stories from the interviews.

Directors asked questions and staff provided answers. Directors thanked staff for work on the values project.
III. INFORMATION
The following information items were received and filed:
4. 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 Miller adjourned the meeting at 11:43 a.m.

WATER PLANNING AND ENVIRONMENTAL COMMITTEE
CALL TO ORDER/ROLL CALL
Chair Preciado called the Water Planning and Environmental Committee meeting to order at 11:49 a.m. Committee members present were Chair Preciado, Vice Chairs Lewinger and Saxod, and Directors Bebee, Boyle, Elitharp, Fong-Sakai, Kennedy, Macedo, McMillan, Reeh, Rios, Serrano, and Wilson. Director Scalzitti was absent. 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 Kerl, Deputy General Manager Denham, Director of Water Resources Gage, Director of the MWD Program Chen, Director of the Colorado River Program Rogers, Director of Public Affairs Vedder, Director of Government Relations Farrel, Water Resources Manager Stephenson, Senior Water Resources Specialist Herbon, Water Resources Specialist Schnell, and Clerk of the Board Nelson.

ADDITIONS TO THE 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 Preciado announced that as the drought persisted, Water Authority subject matter experts would provide an integrated drought presentation to the Water Planning & Environmental Committee.

DIRECTORS’ COMMENTS
There were no Directors’ Comments.
I. CONSENT CALENDAR
   There were no items on the Consent Calendar.

II. ACTION/DISCUSSION/PRESENTATIONS
   The agenda was taken out of order.
   3. Drought Presentation.

   Ms. Gage began the drought presentation. Mr. Stephenson provided an update on water supply conditions, Ms. Chen provided an update on MWD drought actions, Ms. Rogers reported a Colorado River update, Ms. Vedder covered outreach updates, and Mr. Farrell provided an update on drought advocacy.

   Board Chair Croucher, and Directors Lewinger, Arant, Hall, Hogan, Bebee, Steiner, and Katz made comments and asked questions and staff responded.


   Ms. Herbon provided a presentation which included background, strategic overview, examples of the climate adaptation action areas, and key takeaways.

2. Update on Long-Term Water Use Efficiency Standards.

   Item II-2. was deferred to the September 23, 2021, meeting.

III. INFORMATION
   The following Information items were received and filed:
   2. Update on Drought Conditions.

IV. ADJOURNMENT
   There being no further business to come before the Water Planning and Environmental Committee, Chair Preciado adjourned the meeting at 12:35 p.m.

IMPORTED WATER COMMITTEE

CALL TO ORDER / ROLL CALL
   Chair Heidemann called the Imported Water Committee meeting to order at 12:39 p.m. Committee members present were Chair Heidemann, Vice Chairs Madaffer and Martinez, and Directors Butkiewicz, Hall, Hogan, Hurst, Macedo, Murtland, Preciado, Serrano, Smith, and Steiner. Committee members absent were Scalzitti and Supervisor Lawson-Remer. 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.
Formal Board
Agenda Item Number 5
September 23, 2021
(August 26, 2021 minutes)

Staff present was General Manager Kerl, General Counsel Hattam, Deputy General Manager Denham, Assistant General Manager Berge, MWD Program Director Chen, Colorado River Program Director Rodgers, Project Manager Poursadighi, and Clerk of the Board Nelson.

ADDITIONS TO AGENDA
There were no additions to the agenda.

PUBLIC COMMENT
There were no public speakers.

CHAIR’S REPORT
Chair Heidemann announced President Biden had appointed Maria-Elena Giner to serve as the United States Commissioner of the International Boundary and Water Commission. He also stated the Bureau of Reclamation issued the first ever shortage declaration on the Colorado River for Calendar Year 2022, and the Board would hear more details from Ms. Rodgers as part of her presentation on Colorado River Hydrology and Basin States update later in the meeting.

Chair Heidemann lastly announced The California Natural Resources Agency was planning two public workshops to provide updates on the State’s Salton Sea Management Program, specifically on the feasibility of water importation to the sea. The virtual meetings were scheduled for August 31, 2021, at 2:00 p.m., and September 2, 2021, at 5:30 p.m.

DIRECTORS’ COMMENTS
There were no comments.

I. CONSENT CALENDAR
There were no Consent Calendar items.

II. ACTION/DISCUSSION/PRESENTATION

1. MWD Issues and Activities Update.
   1-A Metropolitan Water District Delegates Report.
   1-B Bay Delta Update.

   Chair Heidemann announced items II-1-A and II-1-B were deferred to the September 23, 2021, meeting.

2. Colorado River Programs.
   2-A Colorado River Hydrology and Basin States Update.

   Ms. Rodgers reported on the Bureau of Reclamation’s hydrology projections and provided an overview of key U.S. Colorado River operating agreements. She discussed renegotiations of the 2007 Interim Guidelines that would establish rules governing the river post 2026. She highlighted Mexico as a partner on the river with similar agreements, programs, and
shortage sharing/Lake Mead storage contributions. Ms. Rodgers discussed the current Colorado River hydrology and Calendar Year 2022 river operations explaining the required reductions/contributions from Arizona, Nevada, and Mexico, with no impact to California due to senior priority rights within the Lower Basin. She stated the next set of operation guidelines discussions had begun and were expected to take multiple years, to be in place by 2026. She noted the Water Authority’s participation was critical to protect and leverage our QSA investments to the benefit of the region and entire basin. She stated that in September 2021 there would be a discussion in committee that focused on Lake Mead Storage.

Staff responded to questions and comments posed by the Board.

2-B Coachella Mid-Canal Storage Project Cost-Sharing Agreement – Phase 1.
Staff recommendation: Authorize the General Manager to execute an agreement between the San Diego County Water Authority, the Coachella Valley Water District (CVWD) and the San Luis Rey River Indian Water Authority (SLR) for cost-sharing of activities related to the design and environmental review of the potential Coachella Mid-Canal Storage Project – Phase 1 for an amount not to exceed $305,000.

Ms. Poursadighi briefed the Board on the proposed Coachella Mid-Canal Lining Project. She reviewed background of the Coachella Canal Lining CIP project, operations, and maintenance and repair (OMR) activities. She explained the objective of the proposed mid-canal storage project was to provide in-line storage for operational control to reduce concrete panel cracking and reduce OMR costs. She discussed the proposed cost and benefit share between the three parties (Water Authority, Coachella Valley Water District, and San Luis Rey Indian Parties), potential savings to the Water Authority, as well as the two-phased approach requiring two separate agreements. She stated the agreement for Phase 1 was for design and environmental review, and should Phase 1 demonstrate technical and financial feasibility, staff would return to the Board with a Phase 2 agreement for consideration. She concluded with the announcement that the Colorado River Work Group concurred with staff recommendation at the July 28, 2021, meeting.

Director Steiner moved, Vice Chair Martinez seconded, and the motion to approve staffs’ recommendation passed unanimously. Ms. Nelson took a roll call vote of the committee. Director Scalzitti and Supervisor Lawson-Remer were absent.

III. INFORMATION
There were no information items.
IV. CLOSED SESSION
Mr. Hattam took the Committee into Closed Session at 1:17 p.m.

1. Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(d)(1)
   SDCWA v. Metropolitan Water District of Southern California;
   San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466; CPF-
   14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350; CPF-18-
   516389; California Court of Appeal (1st District) Case Nos. A146901; A148266;
   A154325; A161144; A162168; California Supreme Court Nos. S243500; and
   S251025

   Mr. Hattam brought the committee out of Closed Session at 1:58 p.m. and stated
   there was no reportable action.

V. ADJOURNMENT
There being no further business to come before the Imported Water Committee, Chair
Heidemann adjourned the meeting at 1:58 p.m.

LEGISLATION AND PUBLIC OUTREACH COMMITTEE
CALL TO ORDER/ROLL CALL
Chair Katz called the Legislation and Public Outreach Committee meeting to order at
2:04 p.m. Committee members present were Chair Katz, Vice Chairs Hilliker and Steiner, and
Directors Butkiewicz, Cate, Croucher, Elitharp, Martinez, Mosca, Reeh, Rios, and Saxod.
Committee members absent were Director Simpson and Supervisor Lawson-Remer. 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 Kerl, General Counsel Hattam, Deputy General
Manager Denham, Assistant General Manager Berge, Director of Public Affairs Vedder,
Director of Government Relations Farrel, Public Affairs Manager Lee, Public Affairs
Representative Gong, and Clerk of the Board Nelson. Also present were legislative
representatives William Ball and Joe Lang.

ADDITIONS TO AGENDA
There were no additions to the agenda.

PUBLIC COMMENT
There were no requests for public comment.

CHAIR’S REPORT
Chair Katz reported on the current legislative session including the Governor’s recall
election and the virtual lunch event that was done as a joint effort by Public Affair’s Citizens
Water Academy and San Diego Green Drinks.
DIRECTORS’ COMMENTS
Director Steiner reminded everyone to vote on the gubernatorial election.

I. CONSENT CALENDAR
There were no consent calendar items.

II. ACTION/DISCUSSION/PRESENTATION
1. Legislative issues.
   1-A. Washington report by William Ball.

   Mr. Ball provided an update on issues in Washington including the John Lewis voting rights bill and the bi-partisan infrastructure bill. He gave a brief update regarding the proposal for a future tour with Congressman Peters of the Lake Hodges pumped storage project.

   1-B. Sacramento report by Kristin Olsen and Joe Lang.

   Mr. Lang provided a Sacramento report which included information on the Governor’s recall election and key budget trailer bills.

2. Consideration to Approve 24-month Regional Communications and Outreach Service Contracts to Katz & Associates for $360,000 and Southwest Strategies for $120,000.
   Staff recommendation: Authorize the General Manager to execute two 24-month contracts (from September 1, 2021 through September 30, 2023) for Regional Communications and Outreach Services with Katz & Associates for a total compensable contract amount of $360,000 (exclusive of reimbursable expense allowance) over the contract term and a contract with Southwest Strategies for a total compensable contract amount of $120,000 (exclusive of reimbursable expense allowance) over the contract term.

   * Director Thorner left the meeting at 2:39 p.m.

   Director Steiner moved, Director Hilliker seconded, and the motion to approve staffs’ recommendation passed. Director Reeh voted no.


   Mr. Lee and Ms. Gong presented the digital water education workbook for the elementary education program. The project came about due to the needs of teachers for a virtual option to teach the water curriculum. The workbook was produced to compliment both the assembly and Splash Lab programs.

   * Director Bebee left the meeting at 3:09 p.m.
III. INFORMATION
The following Information item was received and filed:
1. Government Relations Update.

IV. CLOSED SESSION
There were no Closed Session items.

V. ADJOURNMENT
There being no further business to come before the Legislation and Public Outreach Committee, Chair Katz adjourned the meeting at 3:23 p.m.

FORMAL BOARD OF DIRECTORS’ MEETING OF AUGUST 26, 2021
1. CALL TO ORDER Chair Croucher called the Formal Board of Directors’ meeting to order at 3:24 p.m.

2. ROLL CALL, DETERMINATION OF QUORUM
Clerk of the Board Nelson called the roll. Directors present were Chair Croucher, Vice Chair Rios, Secretary Butkiewicz, and Directors Abdullahi, Arant, Ayala*, Boyle, Cate, Elitharp, Fong-Sakai, Hall, Heidemann*, Hilliker, Hogan, Hurst, Katz, Kennedy, Lewinger, Macedo, Madaffer*, Martinez, McMillan, Miller, Murtland, Mosca, Preciado, Reeh, Saxod, Scalzitti, Serrano, Smith, Steiner, and Wilson.

Directors absent were Bebee, Simpson, Thorner, and Supervisor Lawson-Remer.

Staff present included General Manager Kerl, General Counsel Hattam, Deputy General Manager Denham, Assistant General Manager Berge, Director of Administrative Services Foster, Director of Colorado River Program Rodgers, Director of Engineering Bousquet, Director of Finance Harris, Director of Government Relations Farrell, Director of Human Resources Kite, Director of MWD Program Chen, Director of Operations & Maintenance Fisher, Director of Public Affairs Vedder, Director of Water Resources Gage, and Clerk of the Board Nelson.

2-A Report on proxies received. No proxies were received.

3. ADDITIONS TO AGENDA
There were no additions to the agenda.

*Director Heidemann arrived at 3:31 p.m.

4. APPROVAL OF MINUTES
Secretary Butkiewicz moved, Director Preciado seconded, and the motion carried at 93.218% of the vote to approve the minutes the Formal Board of Directors’ meeting of July 22, 2021.
5. **OPPORTUNITY FOR MEMBERS OF THE PUBLIC WHO WISH TO ADDRESS THE BOARD ON MATTERS WITHIN THE BOARD’S JURISDICTION.**

Patrick O’Dowd, ACWA Vice-President candidate, addressed the Board regarding the upcoming ACWA Board Officer nominations.

6. **PRESENTATIONS AND PUBLIC HEARINGS**

6-A Recognition of Seevani Bista, Senior Water Resource Specialist, Employee of the 4\(^{th}\) Quarter.

Ms. Kerl introduced Ms. Bista and congratulated her on being named employee of the 4th quarter. Ms. Bista briefly addressed the Board. Chair Croucher congratulated Ms. Bista on her achievement.

7. **REPORTS BY CHAIRS**

7-A Chairs report: Chair Croucher reported on drought challenges in the region and MWD drought related actions.

He reported that staff had responded to approximately 10 public records requests over the following 2 weeks from various news outlets including the New York Times and ASCE Engineering Magazine. He stated they provided a great opportunity to highlight the investments by our region towards reliable water supply and drought solutions.

In closing he announced that Director Hogan retired from his position as a MWD Delegate. He stated that an appointment for his replacement would be announced at the September 23, 2021, Board meeting. He also reported the upcoming retirement of Director Butkiewicz as an MWD Delegate and stated more information would be shared in the following months.

7-B **Report of Committee Actions**

Administrative and Finance Committee
Water Planning and Environmental Committee
Imported Water Committee
Legislation and Public Outreach Committee

Ms. Nelson reported on all action taken during the committee meetings.
8. **CONSENT CALENDAR**
   Director Madaffer moved, Secretary Butkiewicz seconded, and the motion carried at 89.107% of the vote to approve the Consent Calendar. Directors voting no, or abstaining are listed under the item. Directors Arant, Kennedy, McMillan, Reeh, and Scalzitti voted no on 8-6. Director Cate recused on 8.2.

   The Board noted and filed the Treasurer’s report.

8.2 Resolution establishing amount due from the city of San Diego for the In-Lieu Charge as a condition of providing water service for Fiscal Year 2022.
   The Board adopted Resolution 2021-19 establishing an amount due of $2,601,556.11 from the City of San Diego for the In-Lieu charge for Fiscal Year 2022.
   Director Cate recused on 8.2.

8.3 Amendment to Professional Services Contract with Ace Janitorial Services, Inc. for Routine Janitorial Services.
   The Board approved an amendment to the professional services contract with Ace Janitorial Services, Inc. for continued janitorial services to the Water Authority through August 31, 2022, for a period of 12 additional months, and increasing total contract funding by $78,600, to an amount not to exceed $157,200.

8.4 Approve Capacity Fee Refund to CornerStone Communities.
   The Board authorized the General Manager to issue a capacity charges refund in the amount of $154,500 to CornerStone Communities.

8.5 Coachella Mid-Canal Storage Project Cost-Sharing Agreement - Phase 1.
   The Board authorized the General Manager to execute an agreement between the San Diego County Water Authority, the Coachella Valley Water District (CVWD), and the San Luis Rey River Indian Water Authority (SLR) for cost-sharing of activities related to the design and environmental review of the potential Coachella Mid-Canal Storage Project – Phase 1 for an amount not to exceed $305,000.

8.6 Consideration to Approve 24-month Regional Communications and Outreach Service Contracts to Katz & Associates for $360,000 and Southwest Strategies for $120,000.
   The Board authorized the General Manager to execute two 24-month contracts (from September 1, 2021 through September 30, 2023) for Regional Communications and Outreach Services with Katz & Associates for a total compensable contract amount of $360,000 (exclusive of reimbursable expense allowance) over the contract term and a contract with Southwest Strategies for a total compensable contract amount of $120,000 (exclusive of reimbursable expense allowance) over the contract term.
Directors Arant, Kennedy, McMillan, Reeh, and Scalzitti voted No on 8-6. The motion carried at 72.896% of the vote to approve 8.6.

9. **SPECIAL REPORT**
   9-A GENERAL MANAGER’S REPORT – Ms. Kerl had nothing further to report.
   9-B GENERAL COUNSEL’S REPORT – Ms. Hattam had nothing further to report.
   9-C SANDAG REPORT – Director Katz reported on action and discussion from the July 23, 2021, SANDAG Board Meeting.
   SANDAG Subcommittees:
   Borders Committee – Director Saxod reported on action and discussion from the SANDAG Borders Committee meeting.
   Regional Planning Committee – Director Boyle. No report was provided.
   9-D AB 1234 Compliance Reports – No reports were provided.

10. **ACTION/DISCUSSION/INFORMATION**
   10-A Adopt resolution supporting candidates for President and Vice-President of the Association of California Water Agencies.
   Staff recommendation:
   - Adopt a resolution supporting Pam Tobin for President of the Association of California Water Agencies.
   - Adopt a resolution supporting Cathy Green for Vice-President of the Association of California Water Agencies.
   - Adopt a resolution supporting Dana Friehauf for Vice-Chair of Region 10 for the Association of California Water Agencies.

   Director Arant spoke briefly regarding the recommended ACWA nominations.

   Director Hogan moved, Director Arant seconded, and the motion carried at 86.063% of the vote to adopt Resolution No. 2021-20 supporting Pam Tobin for President of the Association of California Water Agencies; Resolution No. 2021-21 supporting Cathy Green for Vice-President of the Association of California Water Agencies; and Resolution No. 2021-22 supporting Dana Friehauf for Vice-Chair of Region 10 for the Association of California Water Agencies.

11. **CLOSED SESSION(S)**
   There were no Closed Session items.

12. **ACTION FOLLOWING CLOSED SESSION**
   There was none.
13. **OTHER COMMUNICATIONS**
   There were no further communications.

14. **ADJOURNMENT**
   There being no further business to come before the Board, Chair Croucher adjourned the meeting at 3:58 p.m.

__________________________  _______________________________
Gary Croucher, Chair               Jerry Butkiewicz, Secretary

_______________________________
Melinda Nelson, Clerk of the Board
September 15, 2021

Attention: Board of Directors

General Counsel’s Report – August/September 2021

Purpose
This report discusses certain meaningful legal matters receiving attention during the months of August/September 2021.

Significant Developments in Pending Litigation

MWD Rate Cases

2010/2012 Rate Cases: On October 24, 2017, the Court of Appeal remanded these consolidated cases to the trial court in San Francisco.

On August 12, 2020, the Court (Hon. Anne-Christine Massullo) issued the final judgment and writ of mandate. The judgment awarded breach of contract damages and interest in favor of the Water Authority of $44,373,872.29. The issued writ of mandate bars MWD from setting unlawful rates, and from including demand management costs in the price charged for delivery of water pursuant to the Exchange Agreement.

On September 11, 2020, MWD filed a notice of appeal in the 2010/2012 Cases, appealing from the judgment and writ of mandate. MWD filed its opening brief on February 5. MWD’s opening brief on appeal challenges aspects of the form of judgment and the issuance of a writ but does not challenge the $44 million damages and interest award. The Water Authority filed its responsive appellate brief on May 7, 2021. MWD filed its reply brief on June 28. On August 2, MWD requested oral argument, and the Court of Appeal held oral argument on September 15, 2021. A ruling should be issued shortly.

After the filing of MWD’s opening brief on appeal, the Water Authority requested payment of the $44 million judgment in the 2010/2012 Cases. On February 16, 2021, MWD paid the judgment owed to the Water Authority without reservation of rights, which payment the Water Authority accepted.

On January 13, 2021, the Court issued an order determining that the Water Authority is the prevailing party under the Exchange Agreement for purposes of recovering its attorneys’ fees. On February 10, 2021, the Court issued a separate order awarding the Water Authority $326,918.34 in litigation costs—the full amount sought by the Water Authority. On April 6, 2021, the Court entered an order by which the Water Authority and MWD stipulated that, unless the prevailing party order is reversed, remanded or vacated on appeal, MWD will pay the Water Authority $13,397,575.66 in attorneys’ fees, plus post-judgment interest of 7 percent per annum. On February 25, 2021, MWD filed a second notice of appeal in the 2010/2012 cases, appealing from the Court’s orders determining that the Water Authority is the prevailing party and
awarding the Water Authority its fees and costs. MWD filed its opening brief on August 5, 2021. The Water Authority’s responsive brief is due September 23, 2021. Oral argument will then be scheduled.

2014 Rate Case: The case filed on May 30, 2014 challenging MWD’s rates adopted in 2014 for 2015 and 2016, and alleging breach of contract, was transferred to San Francisco Superior Court and is presently assigned to Judge Massullo. The case was stayed until August 27, 2020. On August 28, 2020, the Water Authority filed its First Amended Complaint. MWD filed a demurrer and motion to strike challenging the Water Authority’s offsetting benefits claim and certain other claims. On February 16, 2021, the Court issued an order overruling MWD’s demurrer in its entirety and denying MWD’s motion to strike, rejecting each of the arguments advanced by MWD. On March 22, 2021, MWD answered the First Amended Complaint, asserting 32 affirmative defenses (most of which were previously rejected by the trial court in the 2010/2012 Rate Cases). MWD separately filed a Cross-Complaint against the Water Authority, seeking declaratory relief on nine causes of action, a judicial reformation of the Exchange Agreement price, and a judicial reformation of the Exchange Agreement. The Water Authority answered the cross-complaint on April 23, 2021.

The Court has entered a case management order setting various deadlines, and a May 16, 2022 date for trial. The Court also consolidated this case with the 2016 and 2018 cases for discovery and trial. The next case management conference is scheduled for September 17, 2021.

2016 Rate Case: The case filed on April 13, 2016 challenging MWD’s rates adopted in 2016 for 2017 and 2018, and alleging breach of contract, was transferred to San Francisco Superior Court and has also been reassigned to Judge Massullo. The case had been stayed for most of the last four years, until the Court lifted the stay on August 27, 2020.

On August 28, 2020, the Water Authority filed its Second Amended Complaint. MWD filed a demurrer and motion to strike challenging the Water Authority’s offsetting benefits claim and the Water Authority’s cause of action seeking a declaration that MWD may not charge the Water Authority for any contract damages, interest, attorneys’ fees or costs assessed against MWD pursuant to the Exchange Agreement. On February 16, 2021, the Court issued an order overruling MWD’s demurrer in its entirety and denying MWD’s motion to strike, rejecting each of the arguments advanced by MWD. On March 22, 2021, MWD answered the Second Amended Complaint, asserting 32 affirmative defenses (most of which were previously rejected by the trial court in the 2010/2012 Rate Cases). MWD separately filed a Cross-Complaint against the Water Authority, seeking declaratory relief on nine causes of action, a judicial reformation of the Exchange Agreement price, and a judicial reformation of the Exchange Agreement. The Water Authority answered the cross-complaint on April 23, 2021.

The Court has entered a case management order setting various deadlines, and a May 16, 2022 date for trial. The Court also consolidated this case with the 2014 and 2018 cases for discovery and trial. The next case management conference is scheduled for September 17, 2021.
2018 Rate Case: This case was filed on June 8, 2018 challenging MWD’s rates adopted in 2018 for 2019 and 2020, and alleging breach of contract, was transferred to San Francisco Superior Court and assigned to Judge Massullo. The case had been stayed until April 16, 2021.

On April 21, 2021, the Water Authority filed a Second Amended Complaint. On May 25, 2021, MWD moved to strike the Water Authority’s allegations regarding Metropolitan’s wheeling rate and inclusion of the Water Stewardship Rate as part of the Exchange Agreement price. On July 19, 2021, the Court issued an order denying MWD’s motion to strike in its entirety, rejecting each argument advanced by MWD. On July 29, 2021, MWD answered the Second Amended Complaint, asserting 32 affirmative defenses (most of which were previously rejected by the trial court in the 2010/2012 Rate Cases). MWD separately filed a Cross-Complaint against the Water Authority, seeking declaratory relief on eleven causes of action, a judicial reformation of the Exchange Agreement price, and a judicial reformation of the Exchange Agreement. The Water Authority answered MWD’s Cross-Complaint on August 31, 2021.

The Court has entered a case management order setting various deadlines, and a May 16, 2022 date for trial. The Court also consolidated this case with the 2014 and 2016 cases for discovery and trial. The next case management conference is scheduled for September 17, 2021.

City of San Diego and SDCWA v. CA State Water Resources Control Board

This is a longstanding dispute over annual regulatory fees paid to the SWRCB for our pending potential San Vicente pumped storage project, which fees are split by the Water Authority and the City of San Diego. All fees have been paid under protest by the agencies. The case is in Sacramento Superior Court and is in the discovery phase. Legal costs are split by the Water Authority and the City of San Diego.

Bonnie Kessner et al v. City of Santa Clara et al

This Proposition 218 case was filed as a class action against numerous public agencies, including the Water Authority and some of its member agencies. The assertion against the Water Authority pertains to the lower water rate the Water Authority provides to certain agricultural customers for a lower level of water service.

Plaintiffs filed a motion to coordinate this case with certain other Proposition 218 cases, which the Water Authority and the other agency parties opposed. The case was assigned to Santa Cruz County Superior Court to have an assigned judge hear the coordination petition. That Court then denied the petition for coordination. The case was set for case management organization, and the parties are now briefing challenges to venue and the claims made by Plaintiffs. The Water Authority and other San Diego County agencies are seeking dismissal or transfer to San Diego County. The Court issued an order but allowing Plaintiffs to amend the complaint. That amended complaint has been filed, and pleading challenges have again been filed. They will be heard on October 7, 2021.
Amicus Issues

No new issues to report.

Requests Pursuant to the Public Records Act (Between August 5 – September 7)

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<th>Requestor</th>
<th>Documents Requested</th>
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<tr>
<td>Butier Engineering, Inc.</td>
<td>As-Needed Construction Management Support Services Proposals</td>
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<tr>
<td>Valeo Partners LLC</td>
<td>Hourly rates for attorneys retained for legal work in 2021</td>
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<tr>
<td>Fundmap/Pageant Media</td>
<td>Assets Under Management</td>
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<tr>
<td>GEI Consultants</td>
<td>2017 Request for Proposals for San Vicente Energy Storage Facility Full-Service Team</td>
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Prepared by: Mark J. Hattam, General Counsel

Attachment: Special Counsel Expenditure Report
### On-going Litigation

<table>
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<th>Special Counsel</th>
<th>Project</th>
<th>Total $ Expended for Aug/Sept 2021 (Fees &amp; Costs)</th>
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<tr>
<td>Dean Gazzo Roistacher LLP</td>
<td>Chula Vista v. Bosler</td>
<td>Privileged</td>
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### Non-Litigation

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<tr>
<td>Dean Gazzo Roistacher LLP</td>
<td>Eminent Domain Matter</td>
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<td>Encroachments</td>
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<td>San Vicente Dock Issue</td>
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<td>Duncan &amp; Allen</td>
<td>Power Issues</td>
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<td>Hawkins Delafield &amp; Wood</td>
<td>Carlsbad Plant CAM</td>
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<td>Liebert Cassidy Whitmore</td>
<td>Personnel Issues</td>
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<td>Procopio Cory Hargreaves &amp; Savitch</td>
<td>General Legal Services</td>
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<tr>
<td>Van Ness Feldman</td>
<td>San Vicente Water Storage Facility Project</td>
<td>$2,360.00 (CIP)</td>
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1 The California Supreme Court has held that the amounts of monthly legal bills for ongoing litigation have privileged status, as they may disclose litigation strategy. *Los Angeles County Bd. of Supervisors v. Superior Court*, (2016) 2 Cal. 5th 282, 286.
September 15, 2021

Attention: Board of Directors

CLOSED SESSION:

Public Employee Employment
Government Code §54957 - Title: General Counsel

Conference with Labor Negotiators, Government Code §54957.6
Designated Board Representatives: Chair, Vice-Chair, Secretary
Unrepresented Employee: General Counsel

Purpose
This memorandum is to recommend a closed session, pursuant to Government Codes §54957 and §54957.6, to discuss the above-referenced matter at the September 23, 2021 meeting.

Prepared by: Mark J. Hattam, General Counsel