San Diego County Water Authority

Debt Management and Disclosure Policy

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Statement of Debt Management and Disclosure Policy

Section I. Debt Management

A. Purpose and Overview

Govt. Code Section 8855 requires local governmental issuers of debt to establish and maintain a debt policy incorporating certain provisions. In addition, in its publication entitled *Best Practice Debt Management Policy*, the Government Finance Officers Association (**GFOA**) states that "Debt management policies are written guidelines, allowances, and restrictions that guide the debt issuance practices of state or local governments, including the issuance process, management of a debt portfolio, and adherence to various laws and regulations." A debt management policy should improve the quality of decisions, articulate policy goals, provide guidelines for the structure of debt issuance, and demonstrate a commitment to long-term capital and financial planning."[1] GFOA recommends as a best management practice that state and local governments adopt comprehensive written debt management policies.

The San Diego County Water Authority (**Water Authority**) has adopted this Statement of Debt Management and Disclosure Policy (**Debt and Disclosure Policy**) as set forth herein in order to provide a set of comprehensive guidelines for the issuance and management of the Water Authority's debt portfolio. Adherence to the Debt and Disclosure Policy is essential to ensure the Water Authority maintains a diversified debt portfolio that supports the Water Authority's financing needs and minimizes the Water Authority's cost of funds.

Certain capitalized terms used in this Debt and Disclosure Policy and not defined in the body of the document have the meanings set forth in the Glossary attached at the end of this Debt and Disclosure Policy.

B. Roles and Responsibilities

Director of Finance – The primary responsibility for debt management rests with the Director of Finance. The Director of Finance shall:

- Provide for the issuance of Water Authority debt at the lowest possible cost and risk;
- Determine the available debt capacity of the Water Authority;
- Provide for the issuance of Water Authority debt at appropriate intervals and in reasonable amounts as required to fund approved capital expenditures;
- Recommend to the Water Authority's Board of Directors (**Board**) the method and manner of sale of Water Authority debt;
- Monitor opportunities to refund debt and recommend such refunding as appropriate to reduce costs or to achieve other policy objectives;

[1] *See* http://www.gfoa.org/debt-management-policy

- Comply with all applicable IRS, MSRB, and SEC rules and regulations governing the issuance of debt;
- Maintain a current database with all outstanding Water Authority debt;
- Provide for the timely payment of principal and interest on all Water Authority debt;
- Comply with all terms and conditions, and disclosure obligations required by the legal documents governing the debt issued;
- Submit to the Board all recommendations to issue debt in accordance with the County Water Authority Act and Resolution No. 89-21 (the **General Resolution**);
- Distribute to appropriate repositories information regarding the Water Authority's financial condition and affairs at such times and in the form required by law, regulation and general practice;
- Provide for the frequent distribution of pertinent information to the rating agencies;
- Provide for the ongoing management of an Investor Relations Program; and
- Apply and promote prudent fiscal practices.

C. Purpose for Borrowing

The Water Authority shall issue debt solely for the purpose of financing the cost of design, acquisition, and/or construction of water system improvements, in furtherance of the Water Authority's Capital Improvement Program (**CIP**). In the issuance and management of debt, the Water Authority must comply with all legal constraints and conditions imposed by federal, State and local law. Appendix A attached hereto highlights the key governing documents and certain debt limitations, and Appendix B attached hereto contains a copy of the County Water Authority Act, California Statutes 1943, Chapter 45, as amended.

D. Ethical Standards Governing Conduct

Members of the Water Authority, the Board and its consultants, service providers, and underwriters shall adhere to standards of conduct as stipulated by the San Diego County Water Authority Local Conflict of Interest Code or the California Political Reform Act, as applicable. All debt financing participants shall maintain the highest standards of professional conduct at all times, in accordance with:

- MSRB Rules, including Rule G-37, shall be followed at all times;
- Municipal Advisors shall adhere to applicable SEC rules;
- Debt financing participants will assist the Water Authority staff in achieving its goals and objectives as defined in this Debt and Disclosure Policy;
- Review any G-17 notices received from the Water Authority's broker-dealers, and determine whether further investigation is needed based on such notice received; and
- All debt financing participants shall make cooperation with the Water Authority staff their highest priority.

Section II. Integration of Capital Planning and Debt Activities

A. Policy Goals Guiding Capital Improvement Program Spending

The Water Authority shall develop and maintain a capital finance model to evaluate the impact of capital program spending, operations and maintenance costs, and debt service on its financial condition. As discussed in the Water Authority's Long-Range Financing Plan (**LRFP**), the Water Authority's overarching financial management objectives are, maximize cost efficiency (minimize costs/rates), provide predictable (smooth) rates and charges to member agencies and maintain intergenerational equity for system users over time (see a copy of the full LRFP on the Water Authority's website located at http://www.sdcwa.org/mission-vision-values-strategies). To that end, the Director of Finance shall oversee the ongoing maintenance of quantitative modeling that includes, but is not limited to, the following:

- Historic and projected cash flows;
- Historic and projected capital expenditures;
- Historic and projected operating costs;
- Historic and projected fund balances, including the Operating Fund, the Rate Stabilization Fund (**RSF**), Pay-As-You-Go Fund (**PAYGO**), Debt Proceeds Fund, Stored Water Fund and Debt Service Reserve Fund
- Historic and projected debt service coverage;
- The most efficient mix of funding sources (long-term debt; short-term debt, and cash);
- Projected revenue requirements; and
- Projected rates and charges.

B. Debt Service Coverage Policies

1. **Debt Service Coverage** - The Debt Service Coverage Ratio (**DSCR**) measures the availability of current financial resources to pay for debt service. It is the ratio of annual revenues (net of operating expenses) to total annual debt service. For example, a DSCR of 1.00 means that after paying all operating expenses, an issuer only has exactly enough funds to pay its debt service obligations.

   The DSCR is one of the primary metrics used by credit rating agencies and investors to assess the creditworthiness of an issuer. In this way it is similar to the income to loan ratio used in qualifying for home mortgage. All other things being equal, a higher DSCR means less borrowing, better credit ratings, and a lower cost of debt. Conversely, a lower DSCR means more borrowing, lower credit ratings, and more expensive debt.

   The Water Authority's General Resolution is the document governing outstanding debt issues. In this document, the Water Authority contractually commits to set rates so as to maintain a minimum DSCR of 1.20 times on senior lien debt. The Water Authority also covenants to maintain net revenues of at least 1.00 times on all outstanding obligations. A copy of the General Resolution can be found in Appendix G.

2. **Enhanced Debt Service Coverage Ratio Target –** Highly-rated issuers generally have DSCRs that exceed the covenanted levels. In August 2006, along with the RSF funding policies, the Board adopted a DSCR policy target of 1.50 times. This DSCR target provided levels more appropriate to preserve the long-term financial integrity of 'AA' rated agency in the midst of a large capital program. In addition to this 1.50 times policy target, the Board also adopted another policy target of 1.00 times on senior lien debt net of capacity charge revenues.

Section III. Procurement and Evaluation of Professional Services

The Water Authority shall procure professional services as required to execute financing transactions and to advise on non-transaction related work. Professional services include Consultants (Municipal Advisor, Legal Counsel-Bond, Disclosure Counsel and Tax); Service Providers (Trustee, Paying Agent, Dissemination Agent, Arbitrage Consultant, Escrow Verification Agent, Bidding Agent for escrow investments, Printer, Letter of Credit, Verification Agent); and an Underwriting Team (Senior Manager, Co-Manager, Selling Group).

A. Selection Process

The selection of financial and legal professionals to assist the Water Authority in carrying out financing programs shall be made through a selection process consistent with the Water Authority's procurement policies and procedures. All consultants, service providers and underwriting team members shall provide the Water Authority with objective advice and analysis, shall maintain the confidentiality of Water Authority financial plans, and shall be free from any conflict of interest pursuant to applicable law. The Water Authority's Local Conflict of Interest Code, and procurement policies and procedures, can be found in in the Water Authority's Standard Professional Service Contract, a copy of which is attached as Appendix C, and in the Water Authority's Administrative Code (see chapters 1.04 and 4.04 therein) a copy of which is attached as Appendix H.

B. Appointment of Municipal Financial Advisor

The Water Authority will select a Municipal Advisor or advisors to assist in the issuance and administration of debt (**Municipal Advisor**) through the Request for Proposals (**RFP**) process.

The criteria to be used in evaluating and selecting a Municipal Advisor should include:

- Experience in providing formal financial advisory services to major utility issuers;
- Experience with diverse financial structuring requirements of major utility issuers;
- Experience and reputation of assigned personnel; and

- Fees and expenses.

A Municipal Advisor under contract with the Water Authority shall not purchase or sell any Water Authority debt. The Director of Finance shall submit to the Board a recommendation for the appointment of a Municipal Advisor. The recommendation shall be accompanied by an evaluation of options and a justification for the recommended course of action. The Director of Finance shall monitor the services rendered by the Municipal Advisor.

Assistance to be provided by a Municipal Advisor will include, but not be limited to:

1. <u>Ongoing Services/Long-Term Forecasting</u>

(i) Review and update as needed the existing model and the LRFP; provide analysis of funding methods and options including analysis of the structure of the LRFP; discussion of issues or difficulties which may be encountered in implementing the LRFP and the strategies to address such issues; prepare and deliver presentations regarding various financial issues to Water Authority staff and the Board as requested.

(ii) Assist the Water Authority in interfacing with rating agencies with the objective of developing a strategy and plan to maintain at a minimum the Water Authority's senior lien and subordinate lien ratings at "AA+/AA" and "AA/AA-", respectively.

(iii) Provide timely information, judgments, and forecasts regarding general economic and capital market conditions.

(iv) Assist the Water Authority in updating its financial strategies and policies when requested. This includes analyzing short, intermediate and long-term financing options.

(v) Advise the Water Authority on the timing, method and structure of its Securities sales.

(vi) Update, modify, evaluate, and improve as necessary the revenue program and rate model which is used to help determine the Water Authority's ability to meet funding requirements for the CIP.

(vii) Be available at reasonable times for consultation to render advice regarding the financial aspects of the Water Authority's program as may be requested by the Board, the General Manager, or the Director of Finance.

(viii) Serve as an IRMA to the Water Authority in accordance with the SEC Municipal Advisor Rule.

(ix) Be available to attend meetings related to MWD LRFP and other related rate issues.

2. Debt Issuance

(i) Prepare financing schedule, monitor progress of financing team participants, facilitate and coordinate completion of tasks and responsibilities in accordance with schedule and revise schedule as necessary.

(ii) Assist in and coordinate the preparation of legal and disclosure documents related to debt issuance.

(iii) Develop a rating agency strategy, prepare rating agency presentation material, schedule meetings with rating agencies, organize and coordinate Board and staff rehearsals and presentations, and coordinate itinerary for rating agency visits as required.

(iv) Prepare and distribute RFP's for underwriters, printers, and other team participants as directed by the Water Authority. Assist in evaluation of proposals, assist in conducting interviews as necessary, and provide recommendation as to firms selected.

(v) Develop and take a primary responsibility for quantitative analysis of structuring alternatives for debt issues including sizing, structure, and term of issue; provide computer modeling and comparison of alternatives analysis; make recommendations and provide rationale for preferred alternatives and ensure that selected alternative provides the best solution as part of the LRFP.

(vi) Assist and coordinate discussions and prepare presentation materials for identified key institutional investors. Coordinate itinerary as necessary for visits to institutional investors or meeting sites.

(vii) Analyze and participate in decision as to timing of sale and consult as to advisability or necessity for rescheduling sale depending on market conditions.

(viii) Prepare analytical discussion of market conditions and projected pricing results prior to sale. Provide independent pre-pricing analysis to Water Authority prior to sale including market activity, projected results, market supply and demand characteristics, and comparable sale analysis.

(ix) Coordinate and monitor marketing programs initiated by underwriter to develop pre-sale market interest. Prepare and coordinate placement of notices and advertisements in periodical publications (e.g. the Bond Buyer) to stimulate market interest.

(x) Assist in development of and recommendation with respect to pre-sale interest rate scale and structure for pre-marketing purposes. Provide recommendation with respect to underwriter retention and syndicate sales prior to sale.

(xi) Analyze market conditions with respect to underwriters' compensation; provide comparable transaction comparisons and recommendation with respect to underwriting spread and components thereof. Negotiate with underwriters' representatives with respect to underwriters' compensation, including liquidity agreement terms and conditions.

(xii) Participate in pricing process, monitor order flow to all managers, analyze volume and type of orders, and provide recommendation as to acceptance of offer to underwrite at conclusion of pricing period.

(xiii) Provide pricing analysis and comparisons following sale; document pricing results and provide written report to Water Authority with respect to final pricing and underwriter compensation level; and deliver quantitative schedules showing results of final pricing.

(xiv) Assist and coordinate administrative matters related to transaction closing, including preparation and distribution of final official statement. Participate in closing procedures.

3. <u>Miscellaneous</u>

(i) Upon request, assist in reviewing and analyzing legislation that may have a financial impact on the Water Authority.

(ii) Assist, when requested, by conducting surveys of the financial activities of other major operating utilities.

(iii) Attend Board meetings and make presentations to the Board, its committees and staff when requested.

(iv) Prepare graphs, charts, etc. for staff presentations, as needed.

(v) Upon request, assist in reviewing and analyzing MWD and State Water issues as they relate to the Water Authority and provide advice, as needed.

C. Appointment of Legal Counsel

All debt issued by the Water Authority shall include a written opinion by legal counsel affirming that the Water Authority is authorized to issue the proposed debt, that the Water Authority has met all federal, state, and local legal requirements necessary for issuance and a determination of the proposed debt's federal income tax status. This approving opinion and other documents relating to the issuance of debt shall be prepared by a nationally recognized legal firm with extensive experience in public finance and tax issues. The General Counsel of the Water Authority shall appoint the legal counsel.

For any negotiated sale of debt in which legal counsel is required to represent the underwriter, the lead underwriter shall make the appointment. Unless otherwise justified, the appointment shall be made from among nationally recognized law firms with significant ownership or operations in California.

D. Appointment of Trustee and Paying Agent

The Director of Finance shall appoint a fiscal agent to provide for the payment of all debt issued by the Water Authority. The selection of a fiscal agent shall be based upon a competitive evaluation of proposals submitted in response to an RFP.

The Director of Finance shall submit to the Board a recommendation for the appointment of a fiscal agent. The recommendation shall be accompanied by an evaluation of options and a justification for the recommended course of action. The Director of Finance shall monitor the services rendered by the fiscal agent to ensure prompt and efficient service to bondholders.

E. Appointment of Printer

The Director of Finance shall select a printer or electronic dissemination provider as required in conjunction with a proposed sale of bonds, for the purpose of printing and mailing Preliminary Official Statements and Final Official Statements to potential investors and members of the finance team. The selection of a printer shall be based on a competitive evaluation of proposals.

F. Appointment of Letter of Credit or Liquidity Facility Provider

In order to comply with the requirements of the bond documents and to ensure the liquidity and marketability of the Water Authority's variable rate debt (including, but not limited to, variable rate bonds and a tax-exempt commercial paper program), the Director of Finance shall take such actions as necessary to procure a letter of credit or line of credit in support of such variable rate debt. The selection of a letter of credit/liquidity bank shall be based on a competitive evaluation of proposals submitted in response to an RFP.

The Director of Finance shall submit to the Board a recommendation for the appointment of a Letter of Credit/Liquidity Facility provider. The recommendation shall be accompanied by an evaluation of options and a justification for the recommended course of action. The Director of Finance shall monitor the trading value and credit ratings of the provider to ensure that the Water Authority's variable rate debt is remarketed at the lowest possible cost, given the legal and policy considerations governing the selection of the bank.

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G. Appointment of Remarketing Agents

The Director of Finance shall, in conjunction with selecting a letter of credit provider, solicit proposals from and select commercial paper remarketers/dealers.

H. Appointment of Verification Agent

In conjunction with the sale of refunding bonds, if required, the Director of Finance shall procure the services of a verification agent. The purpose of the verification agent is to confirm that sufficient proceeds are invested in permitted federal securities and to ensure the timely repayment of principal and interest on the bonds being refunded. The verification agent must be a nationally recognized provider of verification services. The selection of a verification agent shall be based upon a competitive evaluation of proposals submitted in response to an RFP.

I. Appointment of Underwriters

To provide for the negotiated issuance of Water Authority debt, the Director of Finance shall maintain an Underwriter Pool (**Pool**). The appointment to the Water Authority's Pool shall be based upon a competitive evaluation of proposals submitted in response to a Request for Qualifications. The Director of Finance shall submit to the Board a recommendation for the appointment of underwriters to the Pool to serve a three-year term. The size and composition of the Pool shall be based upon the projected financing needs of the Water Authority. Criteria used in the appointment of qualified underwriters to the Pool shall include:

- Demonstrated ability serving on complex financial transactions;
- Demonstrated ability with major water issuer financings;
- Demonstrated ability to structure a debt issue efficiently and effectively;
- Demonstrated ability to sell Water Authority debt to institutional and retail investors;
- Demonstrated ability to put capital at risk;
- Quality and applicability of financing ideas;
- Experience and reputation of assigned personnel; and
- Indicative fees and expenses.

Prior to any negotiated transactions, an RFP will be issued to the Pool and a financing team recommended to the Board for selection. The composition of the team will be dependent on the size of the sale and the need to achieve a broad distribution of Water Authority debt among both retail and institutional investors. The recommendation shall be accompanied by an evaluation of options and a justification for the recommended course of action.

In connection with the approval of the underwriting team, the Board shall appoint a lead underwriter. The lead underwriter shall have demonstrated ability to manage a number of firms in a complex financial transaction.

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J. Appointment of Other Service Providers

The Director of Finance will solicit proposals for the following services as needed:

- Continuing Disclosure Agent – Service provider that ensures disclosure documents are disseminated to regulators and investors in compliance with regulations and continuing disclosure agreements.
- Arbitrage Consultant – Service provider that calculates the arbitrage accrued to transactions for the purpose of IRS filings.
- Open Market Securities Agent – Service provider that solicits prices for escrow fund investments and executes the purchase of selected investments.

Section IV. Transaction-Specific Policies

A. Method of Sale

1. **Competitive Bid Method -** Unless otherwise justified and deemed necessary to minimize the costs and risks of the Water Authority's bond issue, the issuance and sale of all fixed rate Water Authority debt shall be achieved by competitive bid. Such bid may take the form of hand-delivered or electronically transmitted offers to purchase the bonds. Any competitive sale of Water Authority debt will require approval of the Board. Water Authority debt issued on a competitive bid basis will be sold to the bidder proposing the lowest true interest cost to the Water Authority provided the bid conforms to the official notice of sale.

2. **Negotiated Bid Method –** When necessary to minimize the costs and risks of Water Authority borrowing, the Director of Finance will submit to the Board a request to sell bonds on a negotiated basis. A negotiated bond issue will provide for the sale of debt by negotiating the terms and conditions of the sale, including price, interest rates, credit facilities, underwriter or remarketing fees, and commissions. Examples of such sales include:

- Variable rate demand obligations;
- An issue of debt so large that the number of potential bidders would be too limited to provide the Water Authority with truly competitive bids;
- An issue requiring the ability to react quickly to sudden changes in interest rates (e.g. refunding bonds);
- An issue requiring intensive marketing efforts to establish investor acceptance;
- An issue of debt with specialized distribution requirements; and
- An issue of debt sold during a period of extreme market disruption or volatility.

If bonds are sold on a negotiated basis, the negotiations of terms and conditions shall include, but not be limited to, prices, interest rates, underwriting or remarketing fees, and commissions. The

Water Authority, with the assistance of its Municipal Advisor, shall evaluate the terms offered by the underwriting team. Guidelines with respect to price, interest rates, fees, and commissions shall be based on prevailing terms and conditions in the marketplace for comparable issuers.

If more than one underwriter is included in the negotiated sale of debt, the Water Authority shall establish appropriate levels of liability, participation and priority of orders. Such levels shall be based upon Water Authority policy with regards to the underwriting responsibility among the team members, the desired allocation of total fees, and the desired distribution of bonds. Guidelines for establishing liability, participation, and priority of orders shall be based on prevailing terms and conditions in the marketplace for comparable issuers.

The Water Authority shall, with the assistance of its Municipal Advisor, oversee the bond allocation process. The bond allocation process shall be managed by the lead underwriter, with the following requirements:

- The bonds are allocated fairly among members of the underwriting team, consistent with the previously negotiated terms and conditions;
- The allocation process complies with all MSRB regulations governing order priorities and allocations;
- The lead underwriter shall submit to the Director of Finance a complete and timely account of all orders, allocations, and underwriting activities with the investor names identified as appropriate.

The Director of Finance shall require a post-sale analysis and reporting for each negotiated bond sale. The Municipal Advisor or the lead underwriter may perform such analysis. A post-sale analysis will include, but not be limited to:

- Summary of the pricing, including copies of the actual pricing wires;
- Results of comparable bond sales in the market at the time of the Water Authority's pricing;
- Detailed information on orders and allocation of bonds, by underwriting firm;
- Detailed information on final designations earned by each underwriter; and
- Summary of total compensation received by each underwriter.

B. Structural Elements

1. **Pledge of Revenues –** The Water Authority's pledge of revenues shall be determined for each debt issue depending upon the debt instrument:

- *General Obligation Bonds* of the Water Authority shall be repaid from voter-approved property taxes on property within the jurisdiction of the Water Authority.
- *Certificates of Participation* of the Water Authority shall be repaid from net revenues, as defined in the General Resolution.

- *Revenue Bonds* of the Water Authority shall be repaid from net revenues, as defined in the General Resolution.
- *Assessment Bonds* of the Water Authority shall be repaid from levies or charges collected within an assessment district formed by the Water Authority pursuant to the Municipal Improvement Act of 1913.

2. **Maturity –** The Water Authority shall issue debt with an average life less than or equal to the average life of the assets being financed. The final maturity of the debt should be no longer than 40 years. Factors to be considered when determining the final maturity of debt include: the average life of the assets being financed, relative level of interest rates, and the year-to-year differential in interest rates.

3. **Maturity Structure –** The Water Authority's long-term debt may include serial and term bonds. Other maturity structures may also be considered if they are consistent with the objectives of the Water Authority's Debt Management Policy.

4. **Coupon Structure –** Debt may include par, discount and premium. Discount and premium bonds must be demonstrated to be advantageous relative to par bond structures. For variable rate debt, the variable rate may be based on one of a number of commonly used interest rate indices and the index will be determined at the time of pricing.

5. **Debt Service Structure –** Debt service will be structured primarily on an approximate level (combined annual principal and interest) basis. Certain individual bond issues, such as refunding bonds, may have debt service that is not level. However, on an aggregate basis, debt service should be structured primarily on a level basis.

6. **Redemption Features –** In order to preserve flexibility and refinancing opportunities, Water Authority debt will generally be issued with call provisions. The Water Authority may consider calls that are shorter than traditional and/or non-call debt when warranted by market conditions and opportunities. For each transaction, the Water Authority will evaluate the efficiency of call provision alternatives.

7. **Credit Enhancement –** The Water Authority shall competitively procure credit enhancement for a sale of bonds if the Director of Finance, in consultation with the Municipal Advisor and the underwriters, determines that it is cost effective to do so.

8. **Senior/Subordinate Lien –** The Water Authority shall utilize both a senior and a subordinate lien structure. The choice of lien will be determined based on such factors as overall cost of debt, impact on debt service, impact on

water rates, and marketing considerations.

9. **Debt Service Reserve Funds –** The Water Authority shall provide for debt service reserve funds to secure Water Authority debt when necessary pursuant to the legal documents governing the transaction or market factors.

Section V. Refunding Policies

The Water Authority shall strive to refinance debt to maximize savings and minimize the cost of funds as market opportunities arise. A present value analysis will be prepared that identifies the economic effects of any refunding to be proposed to the Board. Upon the advice of the Director of Finance, with the assistance of the Municipal Advisor and Bond Counsel, the Water Authority will consider undertaking refundings for other than economic purposes, such as to restructure debt, change the type of debt instruments being used, or to retire a bond issue and indenture in order to remove undesirable covenants.

On December 22, 2017, the Tax Cuts and Jobs Act (H.R. 1) was signed into law. The Tax Cuts and Jobs Act eliminates the ability to issue tax-exempt advance refunding bonds after December 31, 2017. An advance refunding bond is generally defined as any refunding bond issued more than 90 days before the redemption of the refunded bond. While the use of tax-exempt advance refunding bonds is no longer available, the Water Authority may still use taxable debt to advance refund bonds and may use tax-exempt bonds when the refunding bonds are issued within 90 days of the call date (i.e., a current refunding).

A. Savings Thresholds

Minimum savings thresholds have been established to help guide the economic analysis of refunding bonds. The minimum savings guidelines are applicable on a maturity-by-maturity basis and are expressed as a percentage of refunded bond par calculated by dividing the expected net present value savings generated by the proposed refunding by the par amount of refunded bonds. Generally, the Water Authority shall only refund bonds to generate debt service savings if the specified minimum savings set forth in the following matrix can be achieved.

To determine if a potential refunding candidate meets the applicable minimum savings threshold specified in the matrix, the Water Authority shall:

		Years to Call		
		0-1	**2-7**	**8 +**
Years from Call to Maturity	0-2	1%	2%	2%
	3-7	3%	3%	4%
	8-15	4%	4%	4%
	16 +	4%	5%	5%

Step 1. Identify which specific savings threshold applies to the potential refunding candidate by

determining (a) how many years there are between the expected refunding date and the first call date and (b) how many years there are from the first call date to the final maturity of the refunding candidate, as shown in the examples below:

Expected Refunding Date	**Refunding Candidate First Call Date**	**Refunding Candidate Final Maturity Date**	**Minimum Threshold Savings**
12-1-2013	12-1-2016 (3 years to call date)	12-1-2027 (11 years call to maturity)	4%
12-1-2013	12-1-2015 (2 years to call date)	12-1-2022 (7 years call to maturity)	3%

Step 2. Determine the expected net present value savings for the potential refunding candidates on a maturity-specific basis. Net present value savings are the expected net present value savings resulting from the potential refunding of the specific-maturity refunded bond. Net present value debt service savings are calculated by discounting the relevant cash flows to the expected refunding bond closing date at a rate equal to the True Interest Cost of the associated, maturity-specific refunding bond, and taking into account all costs of issuance, including underwriters' discount.

Step 3. Divide the net present value savings for the specified maturity calculated as described above by the par amount of the refunded bonds. If the percentage savings calculated is equal to or greater than the specified minimum savings threshold, the potential refunding candidate is deemed to meet the minimum savings threshold. If the percentage savings is less than the specified minimum savings threshold the refunding candidate does not meet the threshold.

As noted previously, the Director of Finance shall have discretion in making the final determination to include individual refunding candidates that are above or below the target in order to optimize policy and/or financial objectives. Factors that may be considered by the Director of Finance include, but are not limited to:

1. **Escrow Investment Yields (Negative Arbitrage) –** For advance refundings, the Director of Finance may take into consideration the available escrow yields relative to the refunding bond yields. If the available escrow yields are lower than the refunding bond yields (negative arbitrage), it will reduce the net present value savings otherwise available from the refunding. The Director of Finance may take negative arbitrage into account in assessing the appropriateness of a potential refunding, especially if the present value cost of such negative arbitrage is significant relative to the overall net present values savings expected to be achieved by the refunding.

2. **Coupon on Refunded Bond –** The Director of Finance may take into consideration whether the coupon on the refunded bond is significantly

higher or lower than the most common outstanding bond coupons of approximately five percent.

3. **General Interest Rate Environment –** The Director of Finance may take into consideration whether the available refunding bond interest rates are generally high or generally low relative to long-term averages of historical rates.

4. **General Interest Rate Outlook –** The Director of Finance may take into consideration the general outlook for future interest rates, as derived from economic forecasts, market forecasts, implied forward rates, or other sources.

5. **Debt Management Considerations –** The Director of Finance may take into consideration debt management issues such as cost and staff efficiencies associated with combining multiple refunding bond issues or combining refunding and new money bond issues.

Section VI. Reinvestment of Proceeds and Internal Controls on Use of Funds

A. Compliance with Laws and Other Legal Documents Governing Reinvestment of Proceeds

1. **General –** The Water Authority shall comply with all applicable Federal, State, and contractual restrictions regarding the use and investment of bond proceeds. This includes compliance with restrictions on the types of investment securities allowed, restrictions on the allowable yield of some invested funds, as well as restrictions on the time period during over which some bond proceeds may be invested. To the extent that a bond issue is credit enhanced, the Water Authority shall adhere to the investment guidelines of the credit enhancement provider.

2. **Requirements of Resolution –** The Water Authority will comply with all terms and conditions of the General Resolution. Such limitations shall include, but not be limited to Section 5.06 of the resolution.

3. **Investment Policies –** The Water Authority's Annual Statement of Investment Policy defines the permitted investments for proceeds from debt issuances. The permitted investments comply with the California State Code. The investment of bond proceeds shall be made in accordance with the Water Authority's Annual Statement of Investment Policy. For the current Annual Statement of Investment Policy, see the Water Authority's website located at http://www.sdcwa.org/policies-resolutions-ordinances.

B. Internal Controls for Use of Proceeds

The Treasurer's Investment Manual outlines the internal controls relating to the investment and management of debt proceeds. The Director of Finance manages the investment of proceeds in accordance with the investment policy. Key elements of the internal controls include dual verification of payments made by wire and department approval of construction invoices remitted by contractors. As discussed below, debt funds are also managed in separate accounts to eliminate the possible use of funds for operating expenditures.

Projects eligible for debt proceeds are limited to projects included in the Water Authority's current CIP. Debt proceeds are restricted to capital projects with no private activity associated with them. Any project with a private activity benefit are cash funded. Projects eligible for the CIP are determined by the Finance Department and validated by the independent financial auditor.

Section VII. Creation and Maintenance of Funds

The Water Authority maintains a number of different funds integral to the LRFP process. Each of these funds is held for a specific purpose and can generally be categorized as either an operating, capital or debt reserve fund. Operating funds provide the Water Authority with monies for emergencies, working capital and water rate management and consist of the Operating Fund and the RSF. Capital funds, currently the largest component of Water Authority funds, are held strictly for capital expenditures and consist of the PAYGO Fund and Debt Proceeds Fund (which includes both long-term and short-term debt proceeds). Debt reserve funds are held in trust for the benefit of investors in the Water Authority's long-term debt.

A. Operating Fund

The Operating Fund holds the Water Authority's working capital, emergency operating reserve and Equipment Replacement Fund. As previously indicated, the Water Authority's Administrative Code sets the target ending balance of the Operating Fund at 45 days of average annual operating expenditures provided that $5 million of such calculated amount to be designated and held available for emergency repairs to the Water Authority's system due to unforeseen events. Working capital ensures that even with a cash receipts and disbursements mismatch, the Water Authority will have at least 30 days of Operating Funds on hand at all times. Given the short-term nature of this fund, liquidity of investments is critical and is ensured by investing the Operating Fund on a monthly basis to cover water purchases and ongoing cash disbursements. The Operating Fund, together with water sales revenue and other revenue sources, provide ample liquidity for working capital.

B. Stored Water Fund

The Stored Water Fund provides the working capital necessary to optimize the Water Authority's local storage assets. Specifically, the Stored Water Fund is designed to ensure that funds are available to maintain the target level of local storage at 70,000 acre-feet in the San Vicente Reservoir and to track revenues from the sale of emergency waters necessary to replenish the water drawn down. Excess monies in the Stored Water Fund may be used to pay for capital projects or to reduce debt costs. For further information on the Stored Water Fund, see the Board's Policy Guidelines for Managing Carryover Storage Supplies and Revisions to the Stored Water Fund Policy dated November 30, 2016.

C. Equipment Replacement Fund

This fund is used to purchase minor capital equipment such as computer systems, vehicles and parts of the Supervisory Control and Data Acquisition (**SCADA**) system. It is funded by transfers from the Operating Fund per depreciation schedule.

D. Rate Stabilization Fund

The RSF was created in Fiscal Year 1989-1990 for the purpose of collecting amounts of 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, to manage debt service coverage, or to smooth out water rate increases. The RSF is a critical short-term water rate management tool that provides the necessary funds to maintain a smooth water rate pattern over a long period of time. With the new melded supply rate, and the expansion of the Water Authority's functional areas with treatment and desalination, the RSF will have an increasingly important role in managing hydrology risk and stabilizing annual revenue needs.

Board policy sets a target funding level for the RSF equal to the financial loss resulting from 2.5 years of above average rainfall, calculated at a 95% exceedance level. Additionally, it establishes a maximum funding level equal to the financial loss resulting from 3.5 years of above average rainfall. Defining the target and maximum funding levels of the RSF in terms of the financial impact of above average rainfall matches the size of the fund to the primary risk it is designed to mitigate and provides additional capacity for rate smoothing.

As a general rule, the Water Authority will transfer portions of its net water revenues not required to meet either its debt service coverage ratio requirement or operating fund requirement into the RSF. The Board may choose to budget for RSF deposits resulting in balances in excess of the target level but not in excess of the maximum level for the purposes of rate smoothing. Balances below the target level are to be replenished within three years. As necessary, the Water Authority will transfer amounts from its RSF into net water revenues to meet its debt service coverage requirements, Operating Fund requirements or to smooth rate increases. Interest earnings accrue to the RSF unless the maximum balance is achieved, at which point they will be deposited into the Operating Fund. The RSF is managed so that any funds above the maximum balance will be transferred to the Operating Fund—Operating Fund balances above the existing 45-day policy are subject to discretionary use by the Board. For further information on the RSF, see Sections 2.01 and 2.03 of the General Resolution.

E. Pay-As-You-Go Fund

The PAYGO Fund was established in Fiscal Year 1990 to serve as a mechanism to collect Capacity

Charges and Standby Charges to be used to pay for the cash portion of the CIP. The PAYGO Fund is a "capital fund", as opposed to a "reserve fund," meaning that the monies in the fund will be spent directly on capital expenditures, not held in reserve for some other purpose. The PAYGO Fund is projected to be spent over the next eleven years in conjunction with cash generated by operations to fund the pay-as-you-go portion of the CIP. Typically, the annual expenditure of PAYGO funds corresponds to a percentage of the annual CIP expenditure for a particular year, as dictated by the optimal funding mix derived through the long-range computer modeling process.

F. Debt Proceeds Fund

Similar to the PAYGO Fund, the Debt Proceeds Fund also holds capital funds for eventual expenditure towards the Water Authority's CIP. Monies deposited into the Debt Proceeds Fund are produced by the Water Authority's sale of tax-exempt securities in the form of long-term and short-term debt. Upon the sale of any single issue of tax-exempt debt, federal tax law currently dictates that the Water Authority must reasonable expect to spend the proceeds of the issue within three years. As a result, the Debt Proceeds Fund will typically fluctuate over two-to-three year periods as funds are raised through debt issuance every two-to-three years and then largely spent prior to the next issuance.

G. Debt Service Reserve Fund

Debt Service Reserve Funds maybe be required under legal documents governing the issuance of the Water Authority's long-term debt. They are funded as either a percentage of the par amount of long-term debt issued or as one year of debt service on the issue and are held in trust for the benefit of investors in the debt issued. The funds may be used for debt service on an issue, if for any reason the Water Authority is unable to make a scheduled payment. In lieu of holding a cash-funded reserve fund, the Water Authority may substitute a surety bond or other credit facility in its place. The decision to cash-fund a reserve fund versus using a credit facility is dependent upon the cost of the credit facility and the investment opportunities and restrictions on a cash-funded reserve fund.

Section VIII. Compliance

A. Arbitrage Liability Management

The Water Authority shall minimize the cost of arbitrage rebate and yield restrictions while strictly complying with tax law. Because of the complexity of arbitrage rebate regulations and the severity of non-compliance penalties, the Water Authority shall solicit the advice of bond counsel and other qualified experts about arbitrage rebate calculations.

The Water Authority must assure payment of the required rebate amounts, if any, no later than 60 days after each 5-year anniversary of the issue date of the bonds, and no later than 60 days after the last bond of each issue is redeemed. Five year anniversary payments require 90% payment of the required rebate amount within 60 days after each 5-year anniversary of the issue date, while redemption payments require 100% payment due within 60 days after the final redemption or maturity date of the bond issue. The Water Authority shall contract with a qualified third-party for preparation of the arbitrage rebate calculation and determination of any required rebate amount.

The Water Authority shall maintain an internal system for tracking expenditure of bond proceeds and investment earnings to meet the arbitrage rebate compliance requirements, including causing arbitrage to be reviewed approximately one year following the issuance of each series of Securities. The expenditure of bond proceeds shall be tracked in the financial accounting system by issue. Investment may be pooled for financial accounting purposes and for investment purposes. When investment of bond proceeds are co-mingled with other investments, the Water Authority shall adhere to IRS rules on accounting allocations.

B. Post-Issuance Tax Compliance

The Water Authority has adopted Written Procedures to Ensure Compliance with Requirements for Tax-Exempt Bonds found in Appendix D and Written Procedures for Issuance of Direct Pay Build America Bonds found in Appendix E. The Water Authority shall comply with such procedures to maintain the tax-exempt status of Water Authority debt obligations or to maintain eligibility for direct pay subsidy payments, as applicable.

C. Continuing Disclosure

The Water Authority shall comply with the requirements of each Continuing Disclosure Certificate entered into at the time of a sale of bonds and in accordance with this Debt and Disclosure Policy as set forth in Section IX below. Annual information provided by the Water Authority generally should be consistent with information contained in any contemporaneous Water Authority Official Statement that is being utilized in a primary offering. In addition to annual disclosure, the Water Authority shall provide ongoing information about certain enumerated events, as defined by regulation and as set forth in the Water Authority's continuing Disclosure Certificates, to the MSRB.

D. Legal Covenants

The Water Authority shall comply with all covenants and conditions contained in governing law and any legal documents entered into at the time of a bond offering.

Section IX. Communication and Disclosure Policies

A. Rating Agencies

The Water Authority shall maintain its strong ratings through prudent fiscal management and consistent communications with the rating analysts. The Director of Finance shall manage relationships with the rating analysts assigned to the Water Authority's credit, using both informal and formal methods to disseminate information. Communication with the rating agencies shall include:

- Full disclosure on an annual basis of the financial condition of the Water Authority;
- A formal presentation, at least biennially or as becomes necessary to the rating agencies, covering economic, financial, operational, and other issues that impact the Water Authority's credit;
- Timely disclosure of major financial events that impact the Water Authority's credit;
- Timely dissemination of the Comprehensive Annual Financial Report, following its acceptance by the Board;
- Full and timely distribution of any documents pertaining to the sale of bonds; and
- Periodic tours of the water system operations, as appropriate.

B. Bond Insurers

The Director of Finance shall manage relationships with the analysts and the bond insurers assigned to the Water Authority's credit, using both informal and formal methods to disseminate information. Communication with the bond insurers shall be undertaken when the Director of Finance, with the assistance of the Water Authority's Municipal Advisor, determines that credit enhancement is cost effective for a proposed bond issue.

C. Public Statements Made by the Water Authority.

In connection with the marketing of its Securities, Water Authority management will make formal presentations to the rating agencies engaged to rate the Securities as stated above and may make presentations to groups of prospective investors. These presentations are governed by, and the Water Authority is required to comply with, the same rules described in this Debt and Disclosure Policy.

Statements which may be considered information expected to reach investors and thus possibly subject to the rules described in this Debt and Disclosure Policy include public addresses, statements and speeches; press releases; information posted anywhere on the Water Authority's website; press conferences; and Board proceedings, all of which may be monitored by rating agencies, investor analysts and other market participants. Accordingly, Water Authority officials should not make statements that are misleading about Water Authority finances and operations, and any such statements should be accurate and complete.

D. Initial or Primary Market Disclosure

The Water Authority must comply with the securities laws when it initially issues Securities and has a continuing obligation to comply with securities laws while its Securities are outstanding. In order to inform potential investors of what they need to know in order to decide whether or not to transact in the Water Authority's Securities, its initial or primary market disclosure (generally in the form of an Official Statement or Offering Memorandum) should include information that describes (i) the Securities, (ii) the Water Authority, (iii) the projects to be financed or refinanced, and (iv) the security and sources of repayment of the Securities. The Water Authority's initial or primary market disclosure will be used by the underwriters in the marketing of its Securities and should contain a description of risks associated with investment in the Securities. A well prepared

Official Statement may also function as the Water Authority's primary defense against claims that the Water Authority violated the antifraud rules in connection with offerings of its Securities.

E. Continuing or Secondary Market Disclosure

The Rule requires underwriters of Securities to obtain a written agreement that the issuer will provide to investors certain ongoing, or "continuing", disclosure. Continuing disclosure information is intended to reflect the financial or operating condition of the Water Authority as it changes over time, as well as specific events occurring after issuance, that can have an impact on both the ability to pay amounts owed and the market value of the Securities if bought or sold prior to maturity. Each publicly-issued Security has its own continuing disclosure requirements, and not all types of continuing disclosure will apply to each.

In furtherance of its continuing disclosure undertakings and to promote compliance with applicable law, the Water Authority has adopted and maintains disclosure policies and procedures that are reasonably designed to (a) result in accurate, timely and complete public disclosures; (b) identify the persons involved in the disclosure process; (c) evaluate other public disclosures that the Water Authority has made, including financial information and other statements, prior to public dissemination; and (d) assure that responsible individuals receive adequate training about their obligations under the Federal securities laws.

The Water Authority's Continuing Disclosure Procedures are set forth in Appendix F attached hereto. Those procedures provide that the Director of Finance, or his or her designee, serves as Disclosure Coordinator for the Water Authority.

Section X. Debt Database Management

The Water Authority shall maintain complete information on its outstanding debt portfolio, in a spreadsheet or database program format. The information in the database shall include, but not be limited to, the following:

- Issue Name
- Initial Issue Par Amount
- Dated Date of the Issue
- Principal Maturity Amounts
- Coupon Rate by Maturity
- Amount Outstanding
- Call Provisions
- Purpose of the Issue
- Credit Enhancer, if any
- Competitive or Negotiated Sale
- Names of Underwriting Team Members
- Other information as applicable

The Water Authority shall use the debt database for the following purposes:

- Generate reports
- Gross annual debt service
- Net annual debt service
- Refunding Analyses
- Output to Fund Accounting System

GLOSSARY

For purposes of this Debt and Disclosure Policy:

"**Annual Debt Transparency Report**" means the annual debt transparency report required to be filed with CDIAC pursuant to Govt. Code Section 8855.

"**Annual Filing**" means annual financial information and operating data to be filed with the MSRB pursuant to Disclosure Agreements.

"**CDIAC**" means California Debt and Investment Advisory Commission.

"**DAC**" means Digital Assurance Certification, LLC, an accounting firm that provides post-issuance securities and tax compliance services to municipal securities market participants.

"**Disclosure Agreement**" means the provisions of each continuing disclosure agreement, ordinance, order, resolution, letter of credit reimbursement agreement, commercial paper dealer agreement, indenture, bond insurance commitment or other agreement of the Water Authority by which the Water Authority undertakes to provide financial and operating data periodically, and timely notices of certain events or other reporting requirements, to the MSRB or others, whether expressly or as the only nationally recognized municipal securities information repository under the Rule.

"**Debt and Disclosure Policy**" means the Statement of Debt Management and Disclosure Policy adopted by the Water Authority on January 25, 2018.

"**Disclosure Counsel**" means counsel engaged from time to time by the Water Authority with the approval of the General Counsel to give advice to the Water Authority in accordance with this Debt and Disclosure Policy.

"**Disclosure Coordinator**" means the officers or employees of the Water Authority charged with exercising the responsibilities of a Disclosure Coordinator under this Debt and Disclosure Policy as described in Appendix F.

"**Disclosure Working Group**" means the officers or employees of the Water Authority charged with exercising the responsibilities of the Disclosure Working Group in preparing or reviewing any Public Statements under this Debt and Disclosure Policy.

"**EMMA**" refers to MSRB's Electronic Municipal Market Access reporting system.

"**Event Notice**" refers to notice of a Listed Event required to be delivered by the Water Authority to the MSRB pursuant to the Disclosure Agreements and the Rule.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

"**Financial Professionals**" means financial professionals performing services for the Water

Authority's debt programs, such as financial advisors, accountants, consultants and underwriters.

"**General Counsel**" means the General Counsel to the Water Authority.

"**Govt. Code Section 8855**" means Section 8855 of the Government Code of the State of California.

"**Investor Inquiry Coordinator**" means the Director of Finance/Treasurer or the officers or employees of the Water Authority charged with exercising the responsibilities of an Investor Inquiry Coordinator under this Debt and Disclosure Policy.

"**IRS**" means the Internal Revenue Service.

"**IRMA**" means Independent Registered Municipal Advisor.

"**Listed Events**" a list of any list of events required to be disclosed under any Disclosure Agreements.

"**Material**", "**Materiality**" or "**Materially**" when used with respect to a fact included in a Disclosure Document means, generally, that a reasonable investor likely would attach significance to it in making a decision to buy, hold or sell Securities of the Water Authority. When questions of Materiality arise, the General Counsel and/or Disclosure Counsel should be consulted, however ultimately it is the issuer's responsibility. When determining Materiality, some items that auditors consider include, for example, whenever the item (i) has a material impact on the financial statements (e.g. a critical accounting estimate or significant unusual transaction), (ii) may become a matter of public interest or exposure, (iii) applies to a new accounting standard or policy or (iv) relates to changes in internal control over financial reporting.

"**Member Agency**" means the 24 member agencies are comprised of 6 cities, 5 water districts, 3 irrigation districts, 8 municipal water districts, 1 public utility district, and 1 federal military base.

"**MSRB**" means the Municipal Securities Rulemaking Board.

"**MWD**" means the Metropolitan Water District of Southern California.

"**Offering Documents**" means preliminary and final Official Statements, commercial paper offering memoranda and other documents by which Securities are offered to the public by the Water Authority as well as solicitation statements by which the Water Authority offers to purchase its Securities or requests consents or waivers regarding Securities.

"**Official Statements**" means any preliminary and final official statements, together with any supplements issued in primary offerings of Securities.

"**Public Information Officer**" means the Director of Public Outreach and Conservation of the Water Authority or the officers or employees of the Water Authority charged with exercising the responsibilities of a Public Information Officer under this Debt and Disclosure Policy.

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"**Presentations/Releases**" means press releases, publications, media interviews, presentations (including investor presentations), speeches, and other statements of the Water Authority or its officials and employees that could reasonably be Material to investors in Securities.

"**Public Statement**" means any statement or other communication that is intended (or reasonably can be expected) to be accessible to and reasonably relied upon by investors in Securities, including, as applicable: (i) Offering Documents; (ii) information filed with the MSRB through the EMMA, including Annual Filings and Event Notices; (iii) information uploaded or linked or posted to the website of the Water Authority; or (iv) statements made by the Water Authority or any of its officials and employees that could reasonably be Material to investors in Securities, including Presentations/Releases.

"**Report of Final Sale**" means a report of the final sale no later than 21 days after the sale of any debt issue.

"**Reporting Period**" refers to the reporting period beginning July 1 through June 30.

"**Rule**" means Rule 15c2-12 adopted by the SEC under the Exchange Act, as the same may be amended from time to time.

"**Securities**" means bonds, notes, certificates of obligation, certificates of participation and other debt obligations or securities of the Water Authority, or the payment of which the Water Authority is obligated to support by a lease, contract or other arrangement, that are sold to or otherwise held or traded in by investors.

"**Securities Act**" means the Securities Act of 1933, as amended.

"**SEC**" means the United States Securities and Exchange Commission.

"**Transcript and File**" means the form of an electronic or paper file for each Public Statement that the Water Authority completes.

"**Water Authority**" means the San Diego County Water Authority.

"**Web Manager**" means [the Information Systems Manager], who reports to the Director of Administrative Services and is the employee of the Water Authority charged with operating, updating, and maintaining the Water Authority's website and exercising the responsibilities of the Web Manager under this Debt and Disclosure Policy.