

- **Board of Directors**  
**Water Planning, Quality and Resources Committee**

December 10, 2002 Board Meeting

---

9-1

---

**Subject**

---

Authorize (1) finalizing contract terms and principles for Seawater Desalination Program agreements, and (2) development of Local Resources Program action plan for 2003

---

**Description**

---

**Seawater Desalination Program**

In October, staff outlined draft contractual terms and preliminary rate impact findings for the Seawater Desalination Program ([Attachment 1](#)). The Water Planning, Quality and Resources Committee directed staff to report back with additional information regarding enlarging the role of seawater desalination within the context of the Integrated Resources Plan Update that also establishes targets for water recycling, groundwater recovery, conservation and water transfers. In particular, the committee inquired how these resources would help lessen future supply uncertainty. In November, staff provided an update of the IRP resource targets and strategies for increasing resource targets to provide reliability through 2025 against multiple uncertainties and reasonable assumptions of resource implementation risk.

Staff has worked with member agencies to provide for participation in regional seawater desalination research and joint efforts to obtain state and federal funding to achieve program objectives. As indicated in previous updates to the Board, performance targets are a cornerstone of Metropolitan's water resource incentive agreements and allow the adjustment or withdrawal of financial commitment to projects that fail to meet development and production targets outlined in project proposals. Additional benchmarks and milestones during project development would also be incorporated to assess progress and risks, and allow for mutually agreeable opportunities for either party to withdraw commitment to projects if necessary. Staff requests board authorization to finalize uniform contract terms and principles that would be applicable to the seawater desalination projects proposed under the SDP Request for Proposal. Upon completion of environmental documentation and approval of a draft agreement by the project sponsor's governing body, projects would be forwarded to the Board for approval of program participation on an individual project basis.

**Local Resources Program**

To support local resource development outlined in the IRP Update, staff seeks authorization to prepare an action plan for additional development of water recycling and groundwater recovery in Metropolitan's service area. The action plan would outline a new competitive solicitation process to encourage development of additional water recycling and groundwater recovery in a manner consistent with the region's overall water supply reliability needs, as outlined in the IRP Update. Previous efforts using a competitive process for water recycling and groundwater recovery resulted in significant cost savings to Metropolitan and its member agencies, while achieving program objectives and local resource targets. Staff anticipates that the key elements of the initial Local Resources Program competitive process for local resource projects would remain unchanged:

- Financial assistance of up to \$250 per acre-foot of production for projects that reduce future Metropolitan capital and operating expenditures;
- Support of local resource production needed to meet regional water supply reliability goals; and
- Competitive proposals evaluated by a review committee consisting of water resource professionals and Metropolitan staff.

The policy principles adopted by the Board in December 1997 (**Attachment 2**) will continue to serve as guidelines for defining administrative rules for the development of cost-effective water recycling and groundwater recovery projects. Staff would prepare, for board action in the first quarter of 2003, an action plan for the LRP to develop an additional 65,000 acre-feet per year of water recycling and groundwater recovery projects as outlined in the IRP Update.

### **California Environmental Quality Act (CEQA)**

---

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA, because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project that may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action is not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

### **Policy**

---

Policy principles for brackish and seawater desalination, adopted by the Board on Feb. 13, 2001 (Minute Item 44356)

SDP and administrative guidelines, approved by the Board on Aug. 20, 2001 (Minute Item 44578)

LRP Principles as guidelines for defining administrative rules for the LRP, approved by the Board Dec. 9, 1997 (Minute Item 42751)

### **Board Options/Fiscal Impacts**

---

#### **Option #1**

Adopt the CEQA determination and authorize finalizing contract terms and principles for the Seawater Desalination Program agreements and development of a Local Resources Program action plan for 2003.

**Fiscal Impact:** None at this time. Fiscal impact to be determined on an individual project basis.

#### **Option #2**

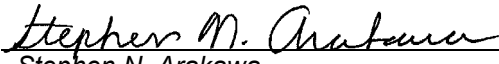
Do not authorize finalizing contract terms and principles for seawater desalination program agreements or development of a Local Resources Program action plan for 2003.

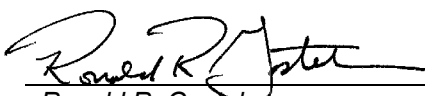
**Fiscal Impact:** None

**Staff Recommendation**

---

Option #1

 11/15/2002  
Stephen N. Arakawa *Date*  
Manager, Water Resource Management

 11/22/2002  
Ronald R. Gastelum *Date*  
Chief Executive Officer

**Attachment 1 – Letter 8a, October 7, 2002 Committee Meeting**

**Attachment 2 – Local Resources Program Principles**

BLA #2066

**• Water Planning, Quality and Resources Committee**

October 7, 2002 Committee Meeting

**8a****Subject**

Proposed draft contractual terms and preliminary rate impact findings for Seawater Desalination Program

**Description**

In September 2002, staff provided an update on the Seawater Desalination Program (SDP) and seawater desalination research activities. The update highlighted preliminary results by the review committee, which indicated that the San Diego County Water Authority's Carlsbad Seawater Desalination Project was considered by staff to be the most responsive to the Request For Proposals (RFP). Staff also recommended moving forward with the other proposals received in light of an expanded seawater desalination potential of up to 150,000 acre-feet (AF) per year as a buffer supply under the Integrated Resource Plan (IRP) Update.

Staff has taken the initial step of providing information in three critical areas related to program implementation: (1) rate impact analysis, (2) outline of contractual principles and key terms, and (3) assessment of seawater desalination as part of a buffer supply in the context of the IRP Update.

**Rate Impacts**

Financial and project production information provided by the respondents was used to estimate the rate impacts if Metropolitan contributed to all five projects. The other major assumption in this preliminary analysis is that water sales would be between 1.8 million and 2.2 million AF. While costs, production, and implementation schedules will be refined over time, preliminary analysis shows that Metropolitan's water rate would include about \$8/AF beginning in 2007 to fund these projects. As additional production comes on-line, the water rate will need to include around \$18-20 per AF for the projects. A graph that illustrates rate impacts over time is shown in Attachment 1. It should be noted that this analysis does not yet account for expenditures that may be reduced as a result of the development of a sizable desalination supply. Hence, these projects could reduce Metropolitan's need to secure water transfers and allow Metropolitan to defer or reduce capital expenditures for treatment and conveyance projects. As project schedules are refined and impacts on other Metropolitan expenditures are integrated in the analysis, these rate impacts will be adjusted.

**Outline of Contractual Principles and Key Terms**

As indicated in the RFP, performance targets will be incorporated into all SDP agreements, which would allow Metropolitan to adjust or withdraw financial commitment to projects that fail to meet development and production targets outlined in project proposals. Failure to meet SDP performance provisions would result in adjustments to the amount of scheduled production Metropolitan would financially support and, in extreme cases, complete withdrawal of Metropolitan commitment to the project.

As reported by staff last month, additional benchmarks and milestones during project development would also be incorporated into agreement terms to assess progress and risks associated with project development, and allow mutually agreeable opportunities for either party to withdraw commitment to projects if necessary. Upon the completion and processing of environmental documentation and the approval of the agreement by the project sponsor's governing body, projects would be forwarded on an individual basis to Metropolitan's Board for approval of SDP participation. Attachment 2 outlines draft agreement terms as originally identified in the RFP. Attachment 3 summarizes a list of expected performance provisions, including benchmarks and milestones to be incorporated into SDP agreements.

Staff's objective for the SDP agreements is to also include key principles that would provide for member agency participation in regional seawater desalination research, and strengthen and enhance efforts to obtain state and federal funding to achieve program and research objectives. One principle would include a non-compete provision to ensure a cooperative approach to secure additional state and federal funds. Additionally, the principles would specify that state or federal funds obtained through this cooperative approach would be prioritized to sequentially favor research efforts, capital expenditures for desalination or power facilities, operations and maintenance costs, and local integrating infrastructure. Finally, the agreement would stipulate that benefits derived from state, federal, or Metropolitan funded research or project production would be shared among all member agencies. The next step is for staff to work with the member agencies in developing agreement principles, which would need to be presented to the Board for consideration and approval.

### **IRP Buffer Supply**

The five project proposals received under the SDP would provide water in advance of current IRP targets for local project supply development. The stated production from these and future projects will be incorporated into a revised local project target as part of a buffer supply in the IRP Update. Seawater desalination would be one part of a buffer supply. A buffer supply is developed in advance of need to mitigate factors of uncertainty in the IRP, such as unexpected increases in demands or reduced local and imported water supplies. A buffer supply would be developed in stages based on criteria developed through the IRP Update. Current estimates of this buffer supply are about 400,000 AF of supply by 2010 above resources needed to provide regional water supply reliability. After considering existing assets on the State Water Project and Colorado River, and general uncertainty in local supply development and planning assumptions, additional buffer supplies beyond these seawater desalination projects should be reviewed as part of the IRP Update process. Critical to the analysis will be the definition of targets for development of water recycling, groundwater recovery and water conservation, and how collectively these resources and seawater desalination meet Metropolitan's regional reliability objectives.

### **Policy**

---

Board Letter 9-12, dated February 13, 2001, adopting policy principles for brackish and seawater desalination

Board Letter 9-6, dated August 20, 2001, approving the Seawater Desalination Program and Administrative Guideline

Board Letter 8-9, dated October 16, 2001, approving the Seawater Desalination Research Program

### **California Environmental Quality Act (CEQA)**

---

CEQA determination for Staff Recommendation:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, where it can be seen with certainty that there is no possibility that the proposed action in question may have a significant effect on the environment, the proposed action is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

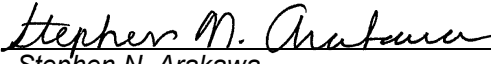
The CEQA determination is: Determine that the proposed action is not subject to CEQA pursuant to Sections 15378(b)(2) and 15061(b)(3) of the State CEQA Guidelines.

## Staff Recommendation

---


Adopt the CEQA determination and:

1. Direct staff to prepare contract principles and general terms and conditions, including principles for research coordination, state and federal funding coordination, and sharing of benefits.
2. Return to the Board in November for adoption of principles and direct staff to prepare contracts to offer participating member agencies.
3. Direct staff to identify the costs and benefits of expanding the IRP buffer supply by including up to 150,000 AF of seawater desalination production by 2010, and identify costs and benefits of accelerating planned Local Resources Program and conservation programs.

  
Stephen N. Arakawa  
Manager, Water Resource Management

10/1/2002

Date

  
Ronald R. Gastelum  
Chief Executive Officer

10/1/2002

Date

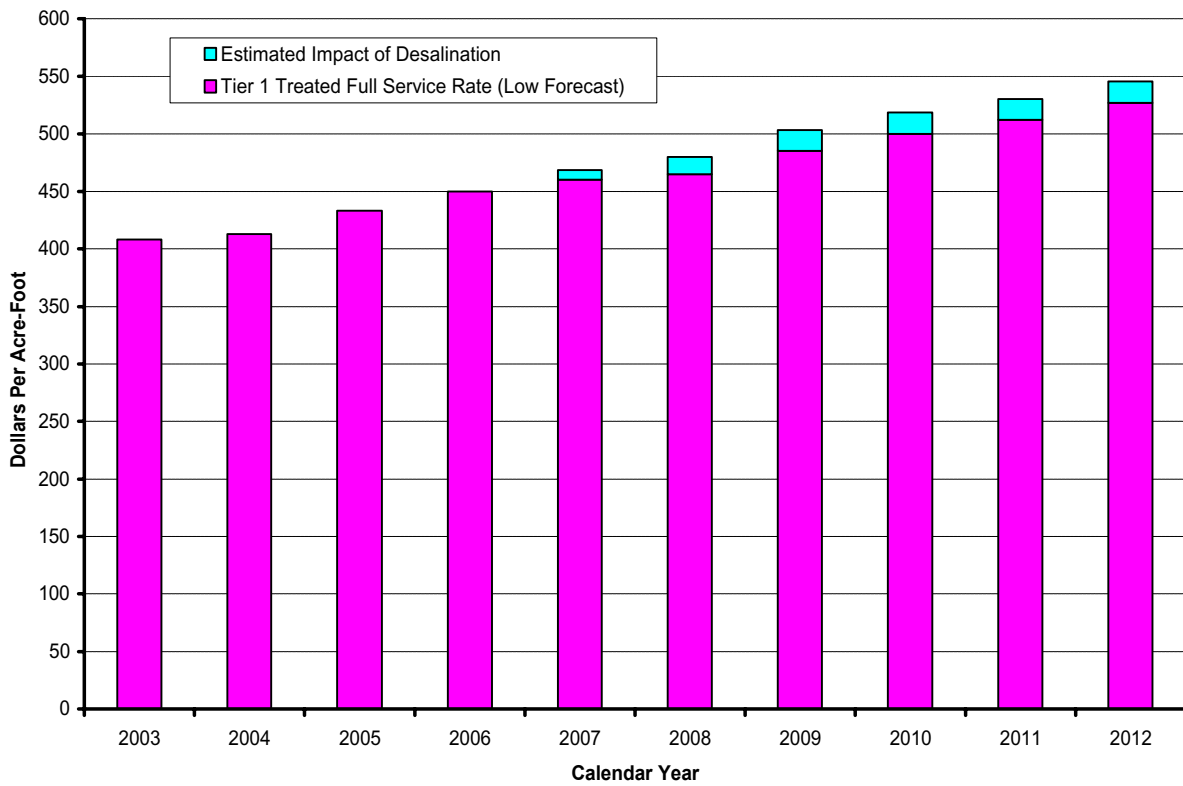
Attachment 1 – Projected MWD Full Service Water Rate (Tier 1 Treated)

Attachment 2 – Seawater Desalination Program Term Sheet

Attachment 3 – Expected agreement performance provisions, benchmarks, and milestones

BLA #1980

### Projected MWD Full Service Water Rate (Tier 1 Treated)



## Seawater Desalination Program Term Sheet

ARTICLE	DESCRIPTION
I. Recitals	Establishes Metropolitan's Board-adopted Seawater Desalination Policy Principles and Administrative Guidelines as basis for agreement and includes items as necessary from the participation of the agreement
II. Warranties	A. Right to distribute and sell Project yield B. Non-discrimination clause C. CEQA compliance
III. Ownership and Responsibilities	A. Identifies owner of Project facilities B. Project Responsibilities including design approvals, permits, and operation and maintenance C. Metering requirement D. Copies of relevant agreements as necessary
IV. Project Yield Certification	Monthly certification of allowable deliveries
V. Billing Process	A. Notification of Project startup B. Monthly invoices and payment method C. Incentives paid as credit on member agency's monthly water service invoice from Metropolitan
VI. Record keeping and Audit	D. Establish and maintain accounting records of Project production and deliveries E. Annual data submittals of production records F. Right to inspect and audit G. Records retention requirement
VII. Term and Amendments	A. Agreement commencement and termination up to 25-year maximum B. Amendment by written mutual consent
VIII. Hold Harmless and Liability	Indemnification Clause
IX. Notice	Information for correspondence
X. Successors and Assigns	Successors and Assigns
XI. Severability	Partial agreement invalidity does not affect agreement validity
XII. Integration	Supercede prior negotiations, representations or agreements
XIII. Governing Law	Action in Los Angeles County



**Expected agreement performance provisions, benchmarks,  
and milestones**

<b>BENCHMARK/MILESTONE</b>	<b>DESCRIPTION</b>
<b>Project Implementation Schedule</b>	<p>Schedule identifying key milestones to assess progress and risks and allow mutually agreeable opportunities for either party to withdraw commitment to projects as necessary. Key milestones include:</p> <p><b>Feasibility Study:</b> Completed document analyzing full-scale project feasibility and implementation issues.</p> <p><b>Permitting and Regulatory Approval:</b> Permit acquisition schedule including Conditional Use, NPDES, Domestic Water Supply, Coastal Development, RWQCB, DHS, intake/discharge facilities, power plant re-powering, etc.</p> <p><b>Third-Party Agreements:</b> Institutional agreements, power purchase arrangements/contracts, project development agreements, etc.</p> <p><b>Site selection:</b> Finalize selection of plant site and land acquisition.</p>
<b>Performance provisions as outlined in Request for Proposals</b>	
Start construction	Contract date, contract award, actual construction start
Start production	Commence project deliveries.
Production targets	Reduced project commitment if minimum threshold requirements are not met.

Board Letter 7-4, November 21, 1997  
Planning and Resources Division

Attachment A

The Metropolitan Water District of Southern California

Local Resources Program (LRP) Principles

November 4, 1997

The Rate Refinement Participants offer the following principles for consideration and approval by the Metropolitan Water District's (MWD) Board of Directors. Upon Board adoption of these principles, MWD staff will work with the member agencies to develop administrative rules. A recommended set of actions and administrative rules to guide implementation of the LRP will then be forwarded to the Board for final approval.

1. Key goals of the proposed LRP are to:
  - a. Assist local projects that improve regional water supply reliability and avoid or defer MWD capital expenditures;
  - b. Emphasize cost-efficient participation in developing local water resources;
  - c. Schedule project production to meet periodically updated IRP local resource targets;
  - d. Minimize administrative cost and complexity;
  - e. Provide equitable project diversity at the regional level; and
  - f. Participate in local project feasibility studies within a specified budget amount.
  
2. For LRP projects that reduce future MWD capital expenditures and water supply costs, MWD will provide up to \$250 per acre-foot of production for agreement terms up to 25 years. Where project benefits are less, commensurately lower MWD contributions would be applied.

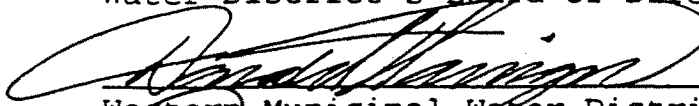
3. An advisory committee shall be established to evaluate applications and make recommendations on proceeding with projects based on a balanced assessment of project attributes. The purpose of the committee is to provide an objective and independent review of proposed projects. Preference will be given to projects based on the following ranking factors.
  - a. Readiness to proceed - projects positioned to proceed into construction and operation on a timely basis;
  - b. Diversity of supply - projects that increase the diversity of supply at the local level;
  - c. Regional water supply benefits - projects that offset a demand for imported supplies or increase regional reliability during periods of shortage and/or emergencies;
  - d. Water quality benefits - project water quality improvements that sustain or augment resource production;
  - e. MWD facility benefits - projects that avoid, defer or reduce the cost of MWD's treatment and distribution systems;
  - f. Operational reliability and probability of success - projects with secured funding, regulatory approvals, firm markets and superior operational reliability;
  - g. Increased beneficial uses - projects leading the way to increased public acceptance of expanded uses; and
  - h. Cost-effectiveness - projects that minimize costs and maximize yield to MWD over the life of the project agreement.


MWD's Board will need to approve the weighting of these factors during adoption of the rules or upon recommendation of the advisory committee.


4. Project participation shall be subject to MWD Board approval.

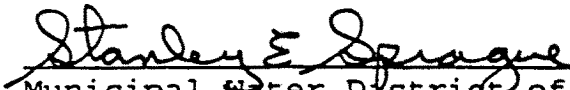
5. LRP agreements shall include water production performance targets to achieve cost-efficiency and reliable production.
6. As a transition procedure, Groundwater Recovery Program applications received before December 1, 1997 and Local Projects Program applications received before August 1, 1995 are grandfathered and not subject to the new review process; however, agreements for these applications must be executed within 12 months of Board adoption of these LRP Principles. Grandfathered applications that fail to meet the agreement execution deadline and all other applications will be evaluated under new LRP rules.
7. Agencies with existing temporary LRP advance conversion amendments shall have the option to convert to the final LRP under the following conditions:
  - a. Existing contract limits shall be recognized;
  - b. Projects shall not be subject to the evaluation process described in Principle #3;
  - c. The sliding scale methodology used for calculating the MWD Contribution under the temporary LRP amendments shall remain in effect permanently;
  - d. Contracts shall include applicable administrative terms consistent with the final LRP; and
  - e. Production schedules shall be provided by the agencies consistent with Principle #5.

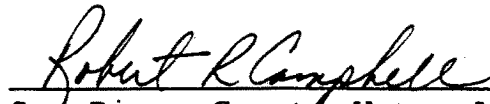
The principles outlined above are supported by the Rate Refinement Participants for consideration by Metropolitan Water District's Board of Directors.

  
Western Municipal Water District

  
Central Basin Municipal Water District  
West Basin Municipal Water District

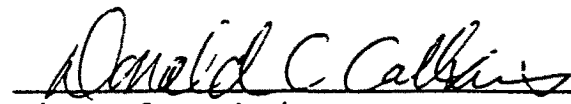
  
Calleguas Municipal Water District

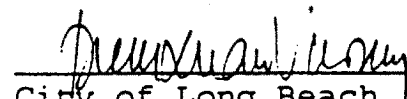
  
Municipal Water District of Orange County

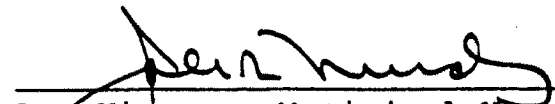
  
San Diego County Water Authority

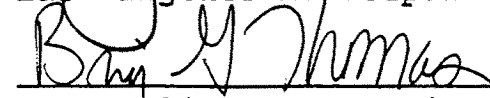
  
Foothill Municipal Water District

  
City of Los Angeles

  
City of Anaheim

  
City of Long Beach

  
Las Virgenes Municipal Water District

  
Metropolitan Water District of Southern California