

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

October 16, 2001 Board Meeting

8-9

Subject

Approve development and implementation of Seawater Desalination Research Program

Description

In August 2001, the Board approved the seawater desalination program and administrative guidelines that outline the development of cost-effective seawater desalination in a manner consistent with the region's overall water supply reliability needs. It is anticipated that Metropolitan will initiate a competitive solicitation process through a Request for Proposals (RFP) in November 2001. In concert with that effort, the Water Planning, Quality and Resources Committee directed staff to report back with additional information regarding development and implementation of a research program for seawater desalination. Consistent with policy principles for brackish and seawater desalination adopted by the Board in February 2001, staff has identified program goals and developed a preliminary framework to guide seawater desalination research.

Goals for a seawater desalination research program include:

- Consistency with the RFP process for supply production
- Consistency with Metropolitan's ongoing efforts in the Desalination Research and Innovation Partnership Program
- Focus on practical research areas based on credible science
- Value-added objectives for Metropolitan and its member agencies

Successful development and implementation of seawater desalination projects require use of proven technology and well-designed and operated systems. Although seawater desalination has been practiced in other parts of the world for several decades, proposed projects in Southern California are expected to receive rigorous scrutiny by regulatory agencies to ensure protection of public health and the environment. To that end, staff has identified a preliminary agenda that will serve as the framework and guide development of a seawater desalination research program by Metropolitan. Key elements include:

- Review and assessment of treatment technologies and research areas critical to Metropolitan and the region's interests
- Site assessment factors including water quality and supply reliability
- Water quality impacts to regional and local water supply distribution systems
- Assessment of Tampa Bay Desalination Project's technical components relative to Southern California

Research projects may be conducted with Metropolitan staff and/or consultants with expertise in seawater desalination practice and emerging technologies. Initially, staff would commence development of the seawater desalination research program with an assessment of current desalination projects and compare project features and applicability to Southern California. Additionally, staff would also identify and evaluate resource issues including permitting, and regulatory approvals [including California Environmental Quality Act (CEQA)] associated with delivery of desalinated seawater to regional and local distribution systems. A budget of \$200,000 is estimated for the initial research effort.

Future program development may involve bench-scale testing, review and assessment of treatment technologies and research areas critical to Metropolitan and the region’s interests, and expanded research of pretreatment alternatives and brine disposal issues. Research projects that provide regional benefits to the development of seawater desalination will be forwarded to the Board for consideration and approval. Additionally, it is anticipated that the research program would address seawater desalination technology and resource issues that may arise while a project is in operation.

Metropolitan will work with its member agencies to develop legislative strategies that seek funding in the form of grant and/or loans and inform decision-makers of the role of seawater desalination in the region’s future water supplies. Semi-annual progress reports and updates regarding the research program will be made to the Board’s Water Planning, Quality and Resources Committee.

CEQA

The proposed action, i.e. the development of the Seawater Desalination Research Program, is categorically exempt under the provisions of CEQA. In particular, the proposed action consists of data collection, research, experimental management strategies and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource. As such, the proposed action qualifies as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

Policy

Board Letter 9-12, dated February 13, 2001, adopting policy principles for brackish and seawater desalination and Board Letter 10-4, dated April 10, 2001, regarding implementation of Metropolitan’s Brackish and Seawater Desalination Policy Principles.

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determination, approve development and implementation of the Seawater Desalination Research Program, and delegate authority to the Chief Executive Officer to award consultant contracts within his power to commence the initial research effort.

Fiscal Impact: \$200,000 for the initial research effort. The estimated fiscal impact will require either a reallocation of the current fiscal year O&M budget funds or an increase of \$200,000 to the current fiscal year budget. Fiscal impact for future work to be determined on an individual research project basis.

Option #2


Do not approve the Seawater Desalination Research Agenda.

Fiscal Impact: \$0

Staff Recommendation

Option #1

 9/27/2001
 Stephen N. Arakawa Date
 Manager, Water Resource Management

 9/28/2001
 Ronald R. Gastelum Date
 Chief Executive Officer