



- **Board of Directors**
Water Quality and Operations Committee

February 10, 2009 Board Meeting

8-3

Subject

Authorize approval of agreements to allow implementation of Orange County reliability projects

Description

The Municipal Water District of Orange County (MWDOC) has proposed three reliability projects that involve interconnections to a Metropolitan pipeline or pipeline in which Metropolitan owns pro rata capacity. The first project (OC-72 Regional Interconnection) involves the introduction of local water into the Allen-McColloch Pipeline (AMP) during emergencies. The second project (Baker Water Treatment Plant) involves the introduction of locally treated water into the AMP at Service Connection OC-74 on a routine basis, as well as during emergencies. The third project (Upper Chiquita Reservoir) involves off-line storage of water delivered from the Robert B. Diemer Water Treatment Plant and reintroduction of this water back into the jointly owned South County Pipeline (SCP) during emergencies. All of these projects are located within MWDOC's service area and will not impact other Metropolitan member agencies. See [Attachment 1](#) for the vicinity map and [Attachment 2](#) for the approximate locations of these projects.

This action delegates authority to the General Manager to execute agreements that will allow implementation of two of these projects, the OC-72 Regional Interconnection and the Upper Chiquita Reservoir, which have already been approved and undergone review under the California Environmental Quality Act (CEQA) by their respective lead agencies. For the Baker Water Treatment Plant, this action gives conceptual approval, with final approval to be considered by the Board upon completion of all required technical and environmental reviews.

Metropolitan's past practice for accommodating the introduction of local water into regional facilities has been either through lease agreements or through the Wheeling Service Policy defined by Division IV, Chapter 1, Section 4119 of Metropolitan's Administrative Code. Use of lease, service connection, and operating agreements are considered most applicable for these proposed Orange County reliability projects. For the purpose of these specific reliability projects, emergencies are defined as scheduled and unscheduled outages of the Diemer plant and the AMP.

Background

The southern portion of MWDOC's service area is nearly 95 percent reliant on imported Metropolitan water from the Diemer plant. This high reliance on a single, regional facility will present long-term challenges for Metropolitan in scheduling facility outages, including extended outages associated with construction of the Diemer Oxidation Retrofit Program (ORP). The proposed reliability projects are being pursued by MWDOC and its retail agencies (at their cost) to improve local system flexibility and achieve compliance with Metropolitan's Administrative Code provision for accommodating regional facility shutdowns. These three projects are supported by Metropolitan staff, as they will increase Metropolitan's flexibility in scheduling routine inspections, repairs and outages required for construction projects on the Diemer plant and the AMP.

Status of Projects

Project No. 1 – OC-72 Regional Interconnection

This project involves modifications to Service Connection OC-72 to allow potable water from the Irvine Ranch Water District (IRWD) to be pumped into the AMP during emergencies when Diemer plant water is not available or cannot be delivered through the AMP. This will allow local water (groundwater, Metropolitan water, or blends of these sources) to be delivered through the AMP into portions of south Orange County that are almost completely dependent upon the Diemer plant.

The maximum amount of local water that could be introduced into the AMP at this location is 25 cubic feet per second (cfs). The design and construction of this project will be funded by MWDOC and its retail agencies and will be coordinated with Metropolitan staff. CEQA approvals by IRWD have been completed for this project. A Notice of Determination was posted April 18, 2008, indicating that the project would not have a significant impact on the environment and that a Mitigated Negative Declaration had been prepared pursuant to the provisions of CEQA.

Project No. 2 – Baker Water Treatment Plant

This project involves construction of a new, local treatment plant, operated by IRWD, which will receive untreated Metropolitan water from the Santiago Lateral and a small amount of local runoff from Irvine Lake. The Baker plant will be base-loaded to routinely meet local demands served by the adjacent IRWD distribution system and by the lower portion of the AMP. During emergency conditions, the Baker plant will be used primarily to supply south Orange County agencies that are almost completely dependent upon the Diemer plant.

The proposed Baker plant will utilize membrane technology and will have a capacity of approximately 34.5 cfs. The Baker plant's treated water will be directed into two systems: the IRWD local distribution system and the AMP.

On a routine basis, 27 cfs of the Baker plant treated water will be directed into the AMP and 7.5 cfs will be conveyed directly through local distribution facilities for delivery to MWDOC's retail agencies. In addition, under emergency conditions, most or all of the Baker plant treated water will be directed into Metropolitan's OC-88 Service Connection (by way of the AMP) for delivery to south Orange County retail agencies through the SCP.

The design and construction of this plant will be funded by MWDOC and its retail agencies and will be coordinated with Metropolitan staff. It is anticipated that IRWD will complete a Mitigated Negative Declaration (MND) for this project by early 2010. Staff will return to the Board for final approval of the AMP lease agreement associated with the Baker Plant Project following IRWD's approval of the project and completion of a MND pursuant to the provisions of CEQA.

Project No. 3 – Upper Chiquita Reservoir

This project involves construction of the Upper Chiquita Reservoir, a finished water reservoir, located near the intersection of Oso Parkway and the Foothill Toll Road (SR 241). This local reservoir will store treated water from the Diemer plant for use during scheduled or unscheduled outages of the Diemer plant or the AMP. The water reintroduced into the SCP from the reservoir will have a disinfection residual that is compatible with Metropolitan water within the SCP.

The maximum reservoir storage will be 800 acre-feet (AF). The reservoir will be filled by gravity at a maximum rate of 50 cfs. Water will be reintroduced into the SCP by a combination of gravity and pumping, depending on the reservoir elevation. The maximum delivery rate back into the SCP will be 50 cfs. On average, about 5 percent or 40 AF of the reservoir volume will be turned over each day to maintain water quality. By altering the operation of pumps at OC-88, Metropolitan will reduce peak daily demands on the AMP and also assist in achieving the required turnover of water within the Upper Chiquita Reservoir.

The design and construction of this project will be funded by MWDOC and its retail agencies, and will be coordinated with Metropolitan staff. CEQA approvals by the Santa Margarita Water District have been completed for this project. A Final Environmental Impact Report (Final EIR) was approved in mid-2008.

Applicable Policy for Proposed Agreements

A combination of lease, service connection, and operating agreements will be used to define the operational and financial obligations for Metropolitan and MWDOC associated with these reliability projects. As proposed, these agreements will include the following terms and conditions:

Project No. 1 – OC-72 Regional Interconnection: Standard Metropolitan wheeling charges will apply to all water introduced into the AMP at the OC-72 Interconnection.

Project No. 2 – Baker Water Treatment Plant: The agreements will be consistent with the existing AMP Sale Agreement that allows for the introduction of local water into the AMP and structured to address the following modes of operation of the Baker plant:

- **Routine deliveries through the AMP south of OC-74:** MWDOC will lease the entire AMP below service connection OC-74 to accommodate the routine introduction of up to 27 cfs of Baker plant treated water at OC-74 and for delivery to eight service connections below this point. Metropolitan will continue to meet a portion of the demands below service connection OC-74. Therefore, Metropolitan will cost share for these deliveries to MWDOC agencies south of OC-74 proportional to the amount of Metropolitan water delivered compared to the total annual acre-feet of water delivered through this portion of the pipeline.
- **Emergency deliveries through the AMP north of OC-74:** MWDOC will pay proportional wheeling charges for up to 34.5 cfs of Baker plant treated water that will be moved through the AMP north of OC-74 during emergency conditions. The proportional charge will be based on the ratio of local water to Metropolitan water treated at the Baker plant.

Project No. 3 – Upper Chiquita Reservoir: This project does not involve the introduction of local water into Metropolitan facilities. Therefore, no Metropolitan charges will be applied for the reintroduction of stored Metropolitan water from the Upper Chiquita Reservoir into the joint agency SCP. An operating agreement will be used to define coordinated operations of the reservoir and OC-88 Service Connection.

Metropolitan will not execute the service connection and pipeline operating agreements, unless and until all required engineering technical reviews, environmental reviews and the CEQA process are completed.

Liability for Water Quality

Staff from Metropolitan, MWDOC, and its retail agencies met with the California Department of Public Health in early 2008 to discuss these three proposed reliability projects. The parties agreed upon a concept that will allow for partitioning the responsibility for water quality monitoring and reporting. Through the proposed agreement terms, MWDOC will assume responsibility for all monitoring and reporting downstream of the OC-72 Service Connection. MWDOC will also be responsible for the development of new Department of Public Health operating permits and all compliance with these operating permits associated with these proposed changes.

Summary

This action delegates authority to the General Manager to execute agreements that will allow implementation of the OC-72 Regional Interconnection and Upper Chiquita Reservoir projects, which have completed the CEQA process. This action also authorizes the General Manager to negotiate agreements for the Baker Plant Project consistent with the terms outlined in this letter. The negotiated Baker plant agreements will be brought to Metropolitan's Board for approval following IRWD's approval of the Baker Plant Project MND.

These projects are consistent with Metropolitan's goals for sustainability as they will enhance the reliability of the existing treatment, conveyance and distribution system in order to maintain reliable deliveries in the future. Specifically, these projects will increase the flexibility of a member agency's system by increasing local storage and allowing the local treatment of water

Policy

To date, the introduction of local water into regional facilities has either been upstream of Metropolitan's water treatment plants, or occurred at a location within the treated water distribution system that only impacted the proponent member agency. Metropolitan's past practice for accommodating these projects has been either through purchases, lease agreements or through the Wheeling Service Policy defined by Division IV, Chapter 1, Section 4119 of its Administrative Code, which states "Wheeling Service shall mean the use of Metropolitan's facilities to transport water not owned or controlled by Metropolitan . . ." Use of lease, service connection, and operating agreements are considered most applicable for these three reliability projects. The proposed projects are consistent with the AMP Sale Agreement and will not impact other member agencies.

In recognition of the potential for projects that may involve introducing local water into regional facilities that could impact multiple member agencies, discussions on the development of a policy were initiated with the member agency managers at the Integrated Area Study Meetings. These discussions are ongoing and the proposed policy guidelines will be returned to the Board at a later date.

California Environmental Quality Act (CEQA)

CEQA determinations for Option #1:

Project No. 1 – OC-72 Regional Interconnection

Pursuant to the provisions of CEQA and the State CEQA Guidelines, the Irvine Ranch Water District, acting as the Lead Agency and a subagency to MWDOC, adopted the South Orange County Interconnect Phases B, C, and D Project Mitigated Negative Declaration (MND) and a Mitigation Monitoring and Reporting Program (MMRP) on April 14, 2008. Metropolitan, as Responsible Agency under CEQA, is required to certify that it has reviewed and considered the information in the MND and MMRP and adopt the Lead Agency's findings prior to the approval of the proposed action. The environmental documentation is available in the Board Executive Secretary's Office for review.

The CEQA determination is: Review and consider information provided in the adopted 2008 MND and MMRP and adopt the Lead Agency's findings related to the proposed action.

Project No. 2 – Baker Water Treatment Plant

The proposed action is not defined as a project under CEQA because it involves the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) 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). Prior to execution of any future agreements related to this action, CEQA documentation will be prepared by the Lead Agency and processed in accordance with CEQA and the State CEQA Guidelines. As the Responsible Agency, Metropolitan will then review and consider the CEQA documentation before taking further action.

The CEQA determination is: Determine that the proposed action is not subject to the provisions of CEQA pursuant to Sections 15378(b)(4) and 15061(b)(3) of the State CEQA Guidelines.

Project No. 3 – Upper Chiquita Reservoir

Pursuant to the provisions of CEQA and the State CEQA Guidelines, the Santa Margarita Municipal Water District, acting as the Lead Agency and a MWDOC client agency, prepared and processed a Final EIR for the Upper Chiquita Reservoir Emergency Storage Project (project). The Final EIR was certified and the project was approved by the Lead Agency on May 28, 2008. The Lead Agency also approved the Findings of Fact, the Statement of Overriding Considerations (SOC), and the Mitigation Monitoring and Reporting Program (MMRP). Metropolitan, as a Responsible Agency under CEQA, is required to certify that it has reviewed and considered the information in the certified Final EIR and adopt the Lead Agency's findings, SOC, and MMRP prior to approval of the formal terms and conditions for the proposed action. The environmental documentation is available in the Board Executive Secretary's Office for review.

The CEQA determination is: Review and consider information provided in the certified 2008 Final EIR and adopt the Lead Agency's findings, SOC, and MMRP related to the proposed action.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determinations and

- a. Authorize the General Manager to execute service connection agreements to allow implementation of the OC-72 Regional Interconnection and Upper Chiquita Reservoir projects; and
- b. Negotiate agreements for subsequent board consideration for the Baker Water Treatment Plant projects following completion and consideration of engineering and CEQA reviews. The agreements will define terms of the lease agreements and wheeling service charges for the movement of local water in the AMP and through the South County Pump Station, if and when applicable.

Fiscal Impact: An estimated \$3 million to \$3.5 million annual loss of revenues from avoided, treated water surcharge for the water being processed/treated at the Baker plant. However, this projected decrease in revenue will be offset by (1) the deferral of need for additional regional treatment facilities; (2) revenues associated with the AMP lease and wheeling of local water; (3) added flexibility gained in scheduling Diemer plant outages; and (4) increased available Diemer plant capacity for the Common Pool. There will be no other fiscal impacts from the proposed projects as coordination, review and construction inspection by Metropolitan staff will be reimbursed by MWDOC.

Business Analysis: These three reliability projects will help MWDOC comply with Metropolitan's Administrative Code Section 4503 (Suspension of Deliveries) provisions for local agencies to accommodate regional facility outages in a manner that is fiscally responsible for the region. Metropolitan will be reimbursed for actual expenses during design and construction of these projects, and will receive revenue for lease of the lower portion of the AMP and for wheeling of all local water moved through the AMP north of OC-74.

Option #2

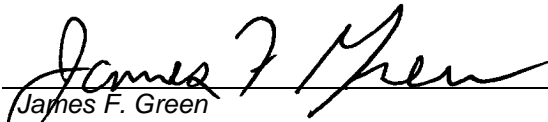
Decline MWDOC's request to authorize the three reliability projects. This will negatively impact MWDOC's ability to address significant reliability concerns and to achieve compliance with Metropolitan's 7-day outage provision in Administrative Code Section 4503.

Fiscal Impact: Minor impacts for Metropolitan related to the difficulty in scheduling routine Diemer plant outages, but large impacts for the longer duration shutdowns associated with the Diemer ORP construction contract. Also, this option would require a significant increase in local investments to achieve identical reliability goals.

Business Analysis: Not applicable

Staff Recommendation

Option #1


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1/30/2009
Date


Jeffrey Kightlinger
General Manager

2/4/2009
Date

Attachment 1 – Vicinity Map

Attachment 2 – Approximate Locations of Proposed Reliability Projects

BLA #6546



