



- Board of Directors
Water Planning and Stewardship Committee

6/14/2011 Board Meeting

8-6

Subject

Authorize entering into a consolidated agreement under the Local Resources Program with the Inland Empire Utilities Agency, Western Municipal Water District, and Chino Basin Desalter Authority for the Chino Basin Desalination Program

Description

Authorization is requested to enter into a consolidated agreement under the Local Resources Program (LRP) with Inland Empire Utilities Agency (IEUA), Western Municipal Water District (WMWD), and Chino Basin Desalter Authority (CDA) for the Chino Basin Desalination Program. The 35,200 acre-feet per year (AFY) project, which consolidates two existing projects with a new expansion project, would increase groundwater pumping from the Chino Groundwater Basin and strengthen local and regional water supplies. The existing projects are currently producing about 24,600 AFY and the expansion project is scheduled to be on line in 2015. This proposed agreement was presented as an information item at the May 2011 Water Planning and Stewardship Committee (WP&S) meeting. As stated at that meeting, this proposal is projected to provide savings to Metropolitan and a stable financial stream to CDA. Performance provisions in the proposed agreement would ensure that incentive payments are only made for increased groundwater production beyond baseline levels.

Background

A portion of the Chino Groundwater Basin has high levels of total dissolved solids and nitrate due to past agricultural practices. IEUA, WMWD, and their member agencies have developed the subject project to treat this degraded groundwater for potable purposes and prevent the spread of this high salinity plume into other areas within the basin. The project is being implemented in three phases. Phases I and II are already constructed and Phase III is under consideration. In 1995, Metropolitan, IEUA, WMWD, and CDA entered into an incentive agreement for Phase I for 9,600 AFY under the Groundwater Recovery Program (GRP). In 2007, the parties signed another incentive agreement for the Phase II for 15,000 AFY under the Groundwater Improvement Program (GIP). Both of these Phases are currently producing water under contracts with sliding scale incentives up to \$250 per acre-foot subject to an annual cost reconciliation process.

In December 2008, CDA submitted an LRP application proposing to expand the capacity of the existing projects from 24,600 AFY to 35,200 AFY. The expansion project complies with LRP eligibility criteria and could receive up to \$250 per acre-foot over 25 years.

In 2009, the cost reconciliation process for the existing Phase II agreement showed that CDA had received about \$6 million more in incentive payments than CDA was entitled under the existing agreement, and that this amount would need to be returned to Metropolitan. The amount to be returned to Metropolitan resulted from CDA receiving additional grant funds to pay for the Phase II project construction. These grant funds reduced the project cost, leading to a reduction in the incentives the project would receive from Metropolitan. No additional incentive payments have been made on this project.

Consolidated Agreement

Staff recommends terminating the existing GRP and GIP agreements and entering into a new LRP agreement that consolidates both existing agreements and incorporates the expansion project. Under the consolidated agreement, Metropolitan would provide a fixed incentive of \$139 per acre-foot over 20 years for the development of 35,200 AFY of recovered groundwater. This incentive rate allows Metropolitan to recover the \$6 million owed by the CDA under the Phase II agreement, save additional expenses over the lifetime of the new agreement, and to streamline contract administration for the project. Staff analysis concludes, in the future, that under terms of the existing agreements and current LRP guidelines for the proposed expansion project, Metropolitan would pay CDA about \$131 million for project production. However, under the proposed consolidated agreement terms, CDA would receive about \$91 million for project production, representing a potential savings of about \$40 million through the term of the proposed agreement.

The project, described in [Attachment 1](#), would treat and deliver degraded groundwater from the Chino Groundwater Basin for potable uses in the service areas of IEUA and WMWD. Key terms that would be incorporated as part of the consolidated agreement include the following:

1. Term - Agreement would be for 20 years;
2. Pay for performance - LRP financial incentives would only be provided for recovered groundwater produced and delivered by the proposed project for beneficial uses;
3. Fixed incentive - Metropolitan would provide a fixed incentive of \$139 per acre-foot. This rate is calculated assuming that CDA will receive about \$27.8 million in federal and state grants. If CDA receives any additional grants above \$27.8 million for the project, the incentive rate will be reduced to reflect 50/50 sharing of such grants between Metropolitan and CDA;
4. Groundwater baseline - To ensure regional benefit, the project must produce an annual baseline amount of groundwater before receiving LRP incentives;
5. Reduction of contractual yield - Performance provisions would allow Metropolitan to reduce its contractual commitment if the project falls short of specified production targets; and
6. Rate structure integrity - Rate structure integrity provisions adopted by the Board would be included.

Savings Estimates

In discussion at the WP&S meeting in May, questions were asked about the projected incentive payments for these projects under the current agreements. Specifically, a question addressed the eligibility of replenishment assessment fees that a local agency pays to the controlling groundwater management district or watermaster. The approximately \$40 million in cost savings estimates for the proposed consolidation agreement assumes that under the current LRP, replenishment assessments would be an eligible cost in the calculation for incentives that would be paid by Metropolitan. This is consistent with original GRP policies adopted by the Board in 1991. These policies recognized that some groundwater clean-up projects would require deliveries of imported water to replenish the basin. As such, the purchase of replenishment deliveries was adopted as an eligible cost under the program. These projects were required to be able to sustain the production of treated groundwater supplies for three years without delivery of replenishment supplies during drought periods. By cleaning up groundwater contamination, where possible, Metropolitan would be helping avoid the spread of contamination and the potential loss of additional groundwater resources.

Given previous board policy on GRP agreements, staff has assumed that without consolidation, sliding scale incentives up to \$250 per acre-foot would be made based on the total project costs, including replenishment assessments, exceeding Metropolitan's water rates. On the other hand, under the proposed consolidated agreement, Metropolitan would provide a flat incentive of \$139 per acre-foot for eligible production. Production would only be eligible if it exceeds a groundwater baseline, ensuring regional benefits. The difference in projected incentive payments between the current approach and the proposed consolidated agreement represents a net savings of approximately \$40 million over the life of the agreement. This includes the recovery of the \$6 million owed by the CDA under the Phase II agreement.

Benefits

In addition to projected cost savings to Metropolitan, benefits of consolidating the agreements include simplifying project administration, eliminating the need for an annual reconciliation of project costs, and eliminating the need for local agencies to provide detailed operations and maintenance cost accounting. Additionally, IEUA, Western, and CDA believe a fixed incentive rate improves their ability to secure bond funding and other financing mechanisms for project construction.

In April 2007, the Board established a goal of 174,000 AFY of new LRP yield. Since then, the Board has approved nine projects totaling 63,970 AFY of production. This project would help meet the Board's goal for additional LRP yield consistent with the new IRP local resources augmentation goal.

Policy

By Minute Item 40833 dated May 10, 1994, the Board authorized entering into a GRP agreement with the Santa Ana Watershed Project Authority, Chino Basin Municipal Water District, and Western Municipal Water District for the Chino Basin Desalination Program, Phase 1 Project.

By Minute Item 47129 dated June 12, 2007, the Board authorized entering into a GIP agreement with Inland Empire Utility Agency, and Western Municipal Water District for the Chino Basin Desalination Program, Phase 2 Project.

By Minute Item 47049 dated April 10, 2007, the Board adopted the Local Resources Program provisions including a goal of 174,000 AFY of new production.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The environmental effects from the design, construction, and operation of the Chino Basin Desalter Phase 3 Expansion Project (Expansion Project) were evaluated by the Chino Basin Desalter Authority (CDA) in an Initial Study and Mitigated Negative Declaration (MND, SCH #2010101061). The MND and Mitigation Monitoring and Reporting Program (MMRP) were adopted by the CDA board of directors on January 6, 2011. The current proposed action would not result in any new significant environmental impacts, nor result in substantial changes to the approved Expansion Project. Hence, the previously adopted environmental documentation, in conjunction with the current proposed action by Metropolitan as a Responsible Agency, fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further environmental documentation is necessary for Metropolitan's Board to act on with respect to the proposed action. The Lead Agency's environmental documentation is available for review in the Board Executive Secretary's Office. Furthermore, the proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making, and involves 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 (Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination for Option #1 is: Review and consider information provided in the adopted 2011 MND and MMRP, and 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

Board Options

Option #1

Adopt the CEQA determination and authorize the General Manager to enter into a Local Resources Program agreement with the Inland Empire Utilities Agency, Western Municipal Water District, and Chino Basin Desalter Authority for up to 35,200 acre-feet per year of recovered groundwater under terms included in this letter.

Fiscal Impact: Up to \$91 million for the production of 660,000 acre-feet of recovered groundwater over 20 years. This represents a potential savings of \$40 million over the lifetime of the agreement. On an annual basis, incentive payments are factored into Metropolitan’s rate projections and would be included in future budgets.

Business Analysis: The project would help achieve Metropolitan’s local resources goal of developing 174,000 acre-feet per year of new supply by 2025.

Option #2

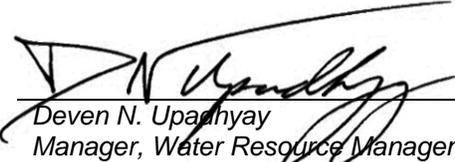
Do not authorize execution of an LRP agreement for the project.

Fiscal Impact: None

Business Analysis: The current GRP and GIP agreement would remain in effect, and Phase III of the expansion project would be evaluated and might be presented to the Board for approval under current LRP agreement guidelines. Metropolitan would pursue other projects to meet its local resources goal of 174,000 acre-foot per year of new water.

Staff Recommendation

Option #1



Deven N. Upadhyay
Manager, Water Resource Management

6/2/2011
Date



Jeffrey Kightlinger
General Manager

6/2/2011
Date

Attachment 1 – Chino Basin Desalination Program Project Description

Chino Basin Desalination Program

Project Description

Overview

The Chino Basin Desalination Program (Project) includes a series of existing and proposed wells, pumps, pipelines and groundwater desalting facilities that will treat degraded groundwater water from the Chino Groundwater Basin. The Project water will be delivered for potable purposes within the service areas of the Inland Empire Utilities Agency (IEUA) and Western Municipal Water District (Western). The Project will be owned and operated by the Chino Basin Desalter Authority (CDA).

Project Facilities

The project is being implemented in three phases. Phases I and II in operation and Phase III is under consideration. Figure 1 shows the location of Project facilities.

Existing Phase I

Phase I facilities include the Chino I Desalter with 14 million gallons per day (MGD) reverse osmosis treatment capacity, 14 groundwater extraction wells, pipelines to convey degraded groundwater to the desalting facilities, pipelines to convey treated water to the existing potable systems, a 3-million gallon reservoir, and two booster pumping stations.

Existing Phase II

Phase II facilities include the Chino II Desalter with 10 MGD reverse osmosis treatment capacity, 8 groundwater extraction wells, pipelines to convey degraded groundwater to the desalting facilities, pipelines to convey treated water to the existing potable systems, a 3-million gallons clearwell, a 5-million gallons storage reservoir, and three booster pumping stations.

Proposed Phase III

The proposed Phase III consists of construction new treatment facilities, wells, pump stations, and pipelines to increase potable water production from 24,600 AFY to approximately 35,200 AFY. Phase III consists of construction of additional reverse osmosis treatment facilities at the Chino II Desalter, up to six new extraction wells, approximately 22,500 feet of pipelines to deliver the degraded groundwater to desalting facilities;; a proposed brine concentrate reduction facility at the Chino II Desalter; expansion of an existing booster pump station, two new booster pump stations, and about 38,300 feet of new pipelines to deliver Project water to users.

Source of Project Water

The source of the water is degraded groundwater in the Chino Groundwater Basin, which contains high levels of total dissolved solids and nitrate due to past agricultural practices.

End Users

The users of the product water are the members of the CDA, IEUA, and Western.

Points of Connection

The Project will start at the wells and terminate at the point of connection to the existing distribution system and sewer and brine discharge lines.

