



- Board of Directors
Water Planning and Stewardship Committee

5/10/2011 Board Meeting

9-2

Subject

Proposal to 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

A proposed consolidated agreement has been developed under the Local Resources Program (LRP) with Inland Empire Utilities Agency (IEUA), Western Municipal Water District (WMWD), and Chino Basin Desalter Authority (CDA) to provide financial incentives for the Chino Basin Desalination Program. The agreement would consolidate two existing projects and a proposed expansion under a single LRP agreement that would yield an annual supply of 35,200 acre-feet under consistent terms and incentives. It would also provide the participating agencies greater outside financing opportunities, potential regional cost savings, streamlined project administration, and greater project accountability.

Background

Metropolitan has long supported local development of groundwater recovery, water recycling and conjunctive use projects in the Chino Groundwater Basin, which has been affected by past agricultural practices that resulted in increased total dissolved solids and nitrate levels. To date, Metropolitan, IEUA, WMWD, and CDA have entered into two incentive agreements for the existing projects totaling 24,600 AFY, of which 9,600 AFY were executed under the Groundwater Recovery Program (GRP) and 15,000 AFY under the Groundwater Improvement Program (GIP). Both agreements provide sliding scale incentives up to \$250 per acre-foot subject to an annual cost reconciliation process. Pursuant to the 2009 cost reconciliation process for the existing agreements, CDA owes Metropolitan about \$6 million.

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 by constructing additional treatment and distribution facilities. The expansion project complies with LRP eligibility criteria adopted by the Board to improve regional water supply reliability and could receive up to \$250 per acre-foot over 25 years.

Consolidated Agreement

Staff recommends terminating the existing GRP and GIP agreements and entering into a new LRP agreement that consolidates both agreements and incorporates the proposed 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 recycled water. This incentive rate allows Metropolitan to recover the \$6 million owed by the CDA and financial credits for water losses under a separate Conjunctive Use Program (CUP) agreement. Staff analysis concludes that under terms of the existing agreements and current LRP guidelines for the proposed expansion project, Metropolitan would have paid CDA about \$131 million for project production. Under the consolidated agreement, however, the CDA would receive about \$91 million for project production. The present worth of the difference (\$40 million) is about \$10.5 million.

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

1. Pay for performance - LRP financial incentives would only be provided for recovered groundwater produced and delivered by the proposed project for beneficial uses;
2. Fixed incentive - Metropolitan would provide a fixed incentive of \$139 per acre-foot, adjusted if CDA receives outside grants above \$27.8 million for the project (50/50 grant sharing);
3. Groundwater baseline - To ensure regional benefit, the consolidated project agreement must produce an annual baseline amount of groundwater before receiving LRP incentives;
4. Reduction of contractual yield - Performance provisions would allow Metropolitan to reduce its contractual commitment if the project falls short of specified production targets; and
5. Rate structure integrity - Rate structure integrity provisions adopted by the Board would be included.

Benefits

Benefits to consolidating the agreements include implementing 35,200 acre-feet per year under consistent terms and incentives that would provide potential regional cost savings, reconciliation of project costs, and greater project accountability. Additionally, IEUA, Western, and CDA believe a fixed incentive rate better enables them 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 Utilities 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.

Fiscal Impact

Up to \$91 million for the production of 660,000 acre-feet of recovered groundwater over 20 years. On an annual basis, incentive payments are factored into Metropolitan's rate projections and would be included in future budgets.



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Manager, Water Resource Management

4/18/2011
Date



Jeffrey Kightlinger
General Manager

4/28/2011
Date

Attachment 1 – Project Description

Ref# wrm12611422

Chino Basin Desalination Program

Project Description

Overview

The project includes a series of existing and proposed wells, pumps, pipelines and desalting facilities that will treat brackish water from the Chino Groundwater Basin. The product water will be delivered for potable use to Inland Empire Utilities Agency (IEUA) and Western Municipal Water District's (Western) service area. The project will be owned and operated by the Chino Basin Desalter Authority (CDA).

Project Facilities

The project includes the existing Chino I Desalter and the Chino II Desalter, and new future facilities that will expand the capacity of the two existing facilities. Below is a description of the project facilities.

Chino I Desalter:

The Chino I Desalter consists of 14 groundwater extraction wells, pipelines to convey raw water to the desalting facilities, pipelines to convey treated water to the existing potable systems, a 14-MGD treatment facility, a 3-million-gallon reservoir and 2 booster pumping stations. Figure 1 shows the location of Chino I Desalter facilities.

Chino II Desalter:

The Chino II Desalter consists of 8 groundwater extraction wells, pipelines to convey raw water to the desalting facilities, pipelines to convey treated water to the existing potable systems, a 10 MGD treatment facility, a 3-million-gallon clearwell, a 5-million-gallon storage reservoir, and 3 booster pumping stations. The location of Chino II Desalter facilities is shown on Figure 1.

Proposed Expansions

The proposed expansion consists of construction of new treatment facilities, wells, pump stations and pipelines to increase potable water production from 24,600 AFY to approximately 35,200 AFY. The project consists of installing and operating the following equipment and components: up to six new extraction wells; approximately 22,500 feet of new pipelines to deliver the raw water to the Chino I Desalter and Chino II Desalter; new treatment facilities at the Chino Desalter II to treat the additional raw water; a proposed brine concentrate reduction facility at the Chino Desalter II; expansion of an existing booster pump station and construction of two new booster pump stations to transfer product water to potable water suppliers; and about 38,300 feet of new pipelines to deliver product (treated) water to water suppliers.

Source of Project Water

The source of the raw groundwater is the Chino Basin. The groundwater will be recovered through the Chino I and Chino II Desalters.

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 existing sewer discharge lines.

