

**TO: Water Authority Board of Directors**

**VIA: Fiscal Policy Committee**

**FROM: Mark Weston, Chair, Member Agency Rate Impact Review Committee (MARIRC)**

**SUBJECT: Final Committee Report**

**DATE: May 21, 2004**

As Chair of the Member Agency Rate Impact Review Committee, I am pleased to report that we have concluded our deliberations as a Committee and respectfully submit to the Water Authority Board of Directors through the Fiscal Policy Committee our Findings and Recommendations regarding a *Preferred Rate Case* for implementation of the Regional Water Facilities Master Plan.

The Regional Water Facilities Master Plan draft report was completed in December 2002 and the San Diego County Water Authority Board of Directors certified the Programmatic Environmental Impact Report for the Master Plan in November 2003. The Master Plan is intended to serve as the roadmap for implementing the major capital improvements needed to deliver supplies to meet demands through the year 2030.

The next major step in the Master Plan process is to add the projects proposed in the Master Plan to the Water Authority's Capital Improvement Program. A large part of the process leading up to the CIP action is determining the schedules, annual expenditures, and the subsequent impacts on the Water Authority's rates and charges. The purpose of the Member Agency Rate Impact Review Committee, or MARIRC, is to work with Water Authority staff to review the options for implementing the Master Plan that meets the region's reliability goals while being affordable. The MARIRC was tasked, by the Water Authority Board, with making a recommendation to the Water Authority Board Fiscal Policy Committee on a *Preferred Master Plan Rate Case* for its action.

All the Water Authority member agencies were invited to participate on the MARIRC with 21 of 23 agencies electing to do so. The MARIRC's first meeting was held on December 19, 2003. The MARIRC has met ten times culminating with a final meeting on May 18, 2004. The MARIRC reported directly to the Fiscal Policy Committee each month on the progress of our efforts. The following is a list of the Committee members and our approved scope of work.

## Committee Membership

<u>Name</u>	<u>Title</u>	<u>Agency</u>
Bob Greaney	Deputy Director Public Works	Carlsbad Municipal Water Dist.
Glen Peterson	Interim Utilities Manager	City of Escondido
Barry Martin	Water Utility Director	City of Oceanside
Dennis Quillen	Asst. Director of Public Works	City of Poway
Larry Gardner	Water Department Director	City of San Diego
Keith Lewinger	General Manager	Fallbrook Public Utility
Mark Weston	General Manager	Helix Water District
David McCollom	General Manager	Olivenhain Municipal Water Dist
Robert Griego	General Manager	Otay Water District
Augie Caires	General Manager	Padre Dam Municipal Water Dist
Greg Ensminger	General Manager	Rainbow Municipal Water Dist
Tom Brammell	General Manager	Ramona Municipal Water District
Annette Hubbell	General Manager	Rincon Del Diablo Municipal Water District
Lin Wurbs	General Manager	San Dieguito Water District
Dennis Bostad	General Manager	Sweetwater Authority
Lloyd Holt	General Manager	Santa Fe Irrigation District
Bill Rucker	General Manager	Vallecitos Water District
Gary Arant	General Manager	Valley Center Municipal Water Dist
Roy Coox	Assistant General Manager	Vista Irrigation
Susie Collins	General Manager	Yuima Municipal Water District

## Scope of Work

- Task 1: Establish Committee, approve final scope and schedule, set process and notify Board of Directors, and report monthly to Fiscal Policy Committee.
- Task 2: Committee Chair and other designated members will make monthly progress reports to Fiscal Policy Committee and assist in the presentation of work product to Board Committee members.
- Task 3: Review purpose and need of Master Plan projects and updated Master Plan reliability analysis.
- Task 4: Review staff proposed alternative scenarios for determining need and priority of approved CIP and Master Plan projects.
- Task 5: Review components of the rate model and comment upon key rate case assumptions.
- Task 6: Review Base Rate Case results and full Master Plan Implementation Rate Case results.

- Task 7: Identify scenarios for alternative rate modeling including at least one scenario that applies prioritization scenarios developed in Task 3.
- Task 8: Review Alternative Rate scenarios requested in Task 6.
- Task 9: Determine and Finalize Committee recommendation(s) on a Preferred Rate Case to the Water Authority Board of Directors.

### **Data Development and Analysis**

The basis for projecting the rate impacts associated with the Master Plan is the Regional Sales Forecast. The Committee was requested to review the forecast for their agency and accept the forecast, or provide revisions and approve a revised forecast, for use in the water rate impact analysis.

Most agencies confirmed the forecasted amounts being used by the Water Authority. Some changes in local supply amounts were noted, they were as follows: average year surface water was reduced by 20,000 AF in 2005 and 23,000 AF in 2020; groundwater amounts were reduced by approximately 3,000 AF from 2005 through 2020; reclaimed water use was reduced 7,700 AF by 2005 and to a total of 9,300 AF by 2020; treated demands were increased by approximately 11,000 AF and untreated demands by approximately 24,000 AF. Overall, there was an increase in projected demand on the Water Authority for regional supplies of 39,000 AF by 2020. These changes in the Regional Sales Forecast are only for use in the water rate analysis. Working with the member agencies the Water Authority staff will update the official Regional Sales Forecast next year as part of the 2005 Urban Water Management Plan update.

Developing a common basis of knowledge was instrumental for the Committee to have the context within which to review the rate projections that would be presented. An initial step in the committee's process was to review the detailed information on the Water Authority's existing rates and charges, the underlying Board policies, business practices used to set rates and charges, and manage the various reserve funds. Specific items covered included amounts and policies regarding rate stabilization and other reserve funds, the ratio of PAYGO to debt, the ratio of fixed revenue to total revenue, the specific rates and charges, and the revenue requirements by service category.

The Water Authority uses non-commodity charges as well as commodity (water purchase) charges as revenue sources. The non-commodity charges are generally fixed charges that do not vary with the amount of water purchased. The Committee focused its efforts in this area on review of the infrastructure access charge and capacity charge.

The Committee discussed at length the need to have growth pay its fair share through a capacity charge related to new Master Plan projects. Committee discussion focused on ensuring that the methodology being used would accurately determine how many of the new projects are being driven by existing demand compared to new demand. The

Committee and staff determined that the best approach to addressing these issues was for the Water Authority to have an independent engineer determine the appropriate methodology to spread the costs between existing and new users. For purposes of rate projections, the existing approved methodology was used since that had an established nexus.

#### Overview on purpose and need of Master Plan projects

The Committee reviewed detailed information about the proposed Master Plan projects. This included descriptions of the projects common to all alternatives, the general types of projects, and the specific individual supply projects that differentiate the three alternatives. The Supply projects are Pipeline 6, Seawater Desalination, and Regional Colorado River Conveyance. Staff noted that maximizing the use of member agency investments in treatment plant capacity and storage is fundamental to the Master Plan.

The Committee was provided with a description of the different types of projects proposed in the Master Plan. The five categories of projects are:

- Protection of existing infrastructure
- Untreated water delivery enhancement
- Carryover storage
- Treated water enhancements
- Supply alternatives

#### Master Plan approach to reliability analysis

Balancing reliability with affordability was one of the key challenges the Committee faced in developing a recommendation on a *Preferred Rate Case*. As the Committee reviewed Master Plan impacts to water rates, it also reviewed the resulting effects on water reliability. The Committee discussed the approach to the Master Plan reliability analysis that utilizes the confluence model to provide statistical probabilities of the chance of shortage and the amount of shortage that could be experienced during the five-month period of the peak season (May through September). The definition of reliability within the context of the confluence model is the ability to meet peak demand on a daily basis during the peak season. Confluence examines the risk of shortage by quantifying uncertainties regarding weather, local supply availability, and implementation, and changes in demographic projections that would deviate from the official SANDAG demographic forecast. Availability of supply from MWD is based upon information provided by MWD from its 2002 Integrated Resources Plan Update. The only change in the IRP since the release of the Master Plan draft is consideration by MWD of the inclusion of a 10 percent planning buffer which accounts for the implementation risk associated with future local and imported supplies and seeks to provide insurance that the actual resource targets are achieved.

One of the key factors the Committee reviewed was a revised analysis that included the addition of canal lining water to the Water Authority's supply portfolio as a result of the execution of the QSA in October 2003. This revised analysis showed that all alternatives had improved reliability from the December Draft Master Plan due to the addition of the canal lining water. An additional analysis was also conducted by staff to show the affects of an allocation of available MWD water under an initiation of Preferential Rights and in the absence of the 100,000 AF of carryover storage contemplated in the Master Plan.

#### Identification of Bookend Rate Cases

The purpose of the bookend rate cases were to include the upper and lower bounds of possible, but not probable, rate impacts and to assist in the prioritization of the Master plan projects. The 2004 Base Rate Case was presented to the Committee as the starting point in terms of its reflection of the exiting commitments and obligations of the Water Authority without inclusion of any Master Plan projects. The Base Case was considered a "No Project" alternative since it would constitute a very unreliable system and was considered an unacceptable choice to the member agencies and the public. The Committee reviewed the major assumptions in the rate case pertaining to Metropolitan projections, inflation factors, allocation to rate categories per Table 10 of the CIP, and execution of the QSA were discussed. The Committee reviewed the Bookend Rate Cases for full implementation of each of the three Master Plan alternatives along with the allocation of Master Plan costs to its respective rate structure category.

#### Alternative Rate Cases

In an effort to examine what could be done to lower potential rate impacts the Committee reviewed five alternative rate scenarios that delayed, deferred or eliminated Master Plan projects. These alternative rate case scenarios were:

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| Scenario A | Delay Second Crossover Pipeline, Escondido-Vista Treated Water Enhancements, and Hubbard Hill, North County Distribution Pipeline, and Slaughterhouse Flow Regulatory Structures |
| Scenario B | Scenario A plus delay 13 relining projects by five years   |
| Scenario C | Scenario B plus eliminate carryover storage (Super San Vincente)   |
| Scenario D | Scenario C plus delay 30 mgd Desal plant expansion by five years   |
| Scenario E | Scenario D plus delay 50 mgd Desal plant by five years   |

#### Treatment Plant sub-alternatives

The Committee reviewed sub-alternatives that specifically compared options for regional treatment capacity. The options were:

- Additional Metropolitan treatment capacity
- Water Authority water treatment plant
- Three member agency water treatment plant expansion options

A treatment sub-alternative was discussed that modified the 2004 Base Case to provide for Water Authority construction and operation of a conventional water treatment plant. This sub-alternative was to analyze the impact of a Water Authority treatment plant in the absence of any other Master Plan Projects. The results of the analysis indicated that the treatment surcharge was competitive with Metropolitan in the near term and less than the Metropolitan surcharge in the long term. The Committee agreed that additional treatment capacity should be provided in the region rather than by Metropolitan.

The Committee then regarded the approach of developing treatment sub-alternatives that would address the question of where the first 50 mgd of in-region treatment plant capacity would be built, at a single regional plant or through a combination of expansions to member agency treatment plants. These proposed treatment alternatives are above and beyond those member agency plants already in design or construction. The Committee reviewed the economic and water rate impacts for each of the treatment sub-alternatives.

### **Development of Committee findings and recommendations**

It was the goal of the Committee to discuss items until members were able to reach consensus. The findings and recommendations attached to this Memorandum reflect that approach. However, there was a provision for the inclusion of minority reports by those members of the Committee that desired to express a different opinion or recommendation to the Board.

During the course of Committee deliberations, items were identified that the Committee believed may not be directly related to a recommendation on a preferred rate case, but were noteworthy in themselves and required follow up. These were put into a Committee “*Parking Lot*” that was to be discussed as time permits or brought up to the attention of Water Authority staff and the Board for future consideration or action. Many of the items were addressed and concluded during the course of Committee meetings. A list of Supplemental Recommendations was developed by the Committee from some of these items and is included in the Findings & Recommendations.