

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

April 13, 2004 Board Meeting

10-2

Subject

Review of System Overview Study

Description

Background. In March of 1996, Metropolitan’s System Overview Study was presented as Volume 2 of the Southern California’s Integrated Water Resources Plan. The purpose of the System Overview Study is to identify distribution capacity needs and timing of needed facilities out into the future. Since 1996, supply and demand projections have been updated as part of the Integrated Water Resources Plan (IRP) Update process. In addition, water quality concerns continue to have increasing impacts on facilities planning efforts. As a result of these changes, staff has developed a draft work plan for updating the System Overview Study ([Attachment 1](#)).

Goals of the System Overview Study Review. The primary goals of the System Overview Study Review would be to: (1) analyze how updated IRP supply and demand projections will affect the existing distribution system; (2) identify and evaluate additional changed conditions since the 1996 System Overview Study, including the changes in treatment processes; (3) identify needs when extending the planning horizon to 2025; and (4) identify potential changes in the Capital Investment Plan.

Policy Implications. The System Overview Study provides the strategic plan for how Metropolitan distribution facilities will be sized and scheduled.

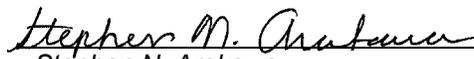
Next Steps. Staff will review the System Overview Study, solicit input from member agencies, and provide analysis of how updated IRP supply and demand projections will affect the existing distribution system. The analysis would identify facilities where capacity will be exceeded, target capital improvements necessary to avoid capacity constraints, estimate costs for identified improvements, propose schedules for improvements, and identify water rate impacts. Staff will periodically update the Board on progress.

Policy

By Minute Item 41734, dated Jan. 9, 1996, Board adoption of the Integrated Resources Plan

Fiscal Impact

None



Stephen N. Arakawa
Manager, Water Resource Management

3/19/2004
Date



Ronald R. Gastelum
Chief Executive Officer

3/23/2004
Date

Attachment 1 – Review of System Overview Study 2004-2005 Draft Workplan, April 2004

Review of System Overview Study
2004/2005
Draft Workplan
April 2004

Introduction

In March of 1996, Metropolitan's System Overview Study was presented as Volume 2 of the Southern California's Integrated Water Resources Plan. Since that time, supply and demand projections have been updated as part of the IRP process. In addition, water quality concerns continue to have increasing impacts on facilities planning efforts. As a result of these changes, staff proposes to review the System Overview Study Workplan.

This proposed Workplan identifies the process for conducting the 2004/2005 Review of the System Overview Study. The Workplan summarizes the objectives, major deliverables, process and schedule.

1. Objectives

The updated study would answer the following questions:

- 1.1 *Can the existing distribution system deliver the IRP Update resource mix?* The updated study would analyze changed conditions since the 1996 IRP as identified in the 2003 IRP Update draft report, including the changes in regional supplies and demands; determine how long the existing distribution system can be counted on to reliably meet demands and when the existing system needs to be augmented.
- 1.2 *How reliable is the existing system?* Additional changed conditions since the 1996 System Overview Study would be identified and evaluated, including the changes in treatment processes required, and areas where shortages are likely to occur without further CIP improvements.
- 1.3 *What projects are required to retain reliability?* Potential projects would be identified to meet projected delivery obligations as well as the earliest date that each project might be needed.
- 1.4 *How will we pay for these Projects?* Project cost estimates would be developed.

2. Deliverables

The major deliverables and milestones for the Review of the System Overview Study are summarized below. Regular reports would be provided to the Board.

- 2.1 *Proposed capital improvement projects*
System storage, transmission, and treatment needs will be compared to capabilities of the existing distribution system to determine when system improvements are required to meet projected deliveries.
- 2.2 *Sensitivity analysis*
The projected on-line dates are dependent upon a number of assumptions such as population growth, weather, local supplies and projects, and peak patterns of use. Reasonable variations in these assumptions will be tested for their effects on the projected on-line dates.
- 2.3 *Funding needs*
Reconnaissance level cost estimates will be developed for each proposed capital improvement project.

2.4 *Funding sources*

Consideration of budgetary needs would include a cash flow type analysis of funding needed to meet construction costs, and a rate impact analysis.

2.5 *Alternative analysis*

An analysis of possible alternate projects will be considered, such as additional water quality exchanges vs. treatment plant upgrades, additional in-basin storage vs. State Water Project east branch enlargement, Bay-Delta improvements vs. other transfers, and additional water conservation vs. recycling where appropriate.

3. Schedule

June 2004	Proposed Capital Improvement Projects
July 2004	Sensitivity Analysis
December 2004	Funding Needs
March 2005	Funding Sources
March 2005	Alternative Analysis