



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

9-7

December 16, 1997

To: Board of Directors (Engineering and Operations Committee--Information)
(Water Planning and Resources Committee--Information)

From: *for* General Manager

Submitted by: Debra C. Man, Chief
Planning and Resources

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Subject: Identification of Need for San Diego Pipeline No. 3 Bypass Project

RECOMMENDATION(S)

For information only.

EXECUTIVE SUMMARY

Part of Metropolitan's commitment to meeting future treated water demands for the San Diego County Water Authority (SDCWA) is the conversion of San Diego Pipeline No. 3 (SDP No. 3) to treated water delivery when San Diego Pipeline No. 6 (SDP No. 6) is completed in early 2005. Analyses show that a bypass pipeline (Bypass) connecting the Skinner Finished Water Reservoir (FWR) to SDP No. 3 should be built. The Bypass would maintain SDP No. 3's design capacity when it is converted for treated water deliveries.

Concurrent with these analyses, staff has been coordinating a request from Rancho California Water District (RCWD) for an additional 40 cfs. of treated water. Staff has informed RCWD that there is no additional capacity in San Diego Pipeline (SDP) No. 4 and that it must build its own pipeline and connect to the Skinner FWR for any additional treated water deliveries.

Preliminary studies conducted by Metropolitan and RCWD staff indicate that both agencies' objectives would be met if Metropolitan constructed the Bypass early, and RCWD built its pipeline to connect to the Bypass rather than the Skinner FWR. Staff will bring appropriate documentation to the board in February for action on the planning, design, and construction of the proposed Bypass. Such documentation will include more detailed identification of the costs, as well as quantification of regional benefits resulting from accelerating the Bypass project.

DETAILED REPORT

Part of Metropolitan's commitment to meeting future treated water demands for the San Diego County Water Authority (SDCWA) is the conversion of San Diego Pipeline No. 3 (SDP No. 3) to treated water delivery when San Diego Pipeline No. 6 (SD No. 6) is completed in early 2005.

Recent hydraulic analyses performed by staff indicate that if San Diego Pipeline No. 3 were converted by connecting directly to the Skinner Finished Water Reservoir (FWR), hydraulic constraints downstream would significantly reduce treated water flows in SDP No. 3 below its design capacity. In order to assure maximum capacity for treated water deliveries for SDP No. 3 in the future, a bypass connecting the Skinner FWR to SDP No. 3 is required. This proposed facility is identified as the San Diego Pipeline No. 3 Bypass (Bypass). The Bypass would connect the Skinner FWR to SDP No. 3 at a point downstream of the existing hydraulic constraint.

The EIR for SDP No. 6 identified the conversion of SDP No. 3 to treated water deliveries, but did not specify how. The hydraulic analyses described above would have been performed shortly after 2000, as part of the planning process for the SDP No. 3 conversion in 2005. The analyses have been conducted now to coordinate Metropolitan's future facility needs with those from Rancho California Water District, a subagency of Western MWD and Eastern MWD.

Staff has been coordinating a request from Rancho California Water District (RCWD) for an additional 40 cfs. of treated water deliveries from the Skinner plant. RCWD currently takes deliveries through 3 connections on San Diego Pipeline (SDP) No. 4. Staff has informed RCWD that there is no additional capacity in SDP No. 4 and that it must build its own pipeline and connect to the Skinner FWR for any additional treated water deliveries. RCWD demands have been accelerating in recent years, and they have identified a need for additional treated water deliveries from Skinner by 2001-02, plus additional demands beyond that period.

Preliminary studies conducted by Metropolitan and RCWD staff indicate that both agencies' objectives would be met if Metropolitan constructed the Bypass early, and Rancho California built its pipeline to connect to the Bypass rather than the Skinner FWR. The benefits from this course of action would be the following:

- o RCWD's request for additional treated water deliveries is met without connecting directly to Skinner FWR.
- o Metropolitan's proposed bypass will meet future treated water capacity objectives for SDP No. 3.
- o Minimizes the total cost to the region required to accommodate facilities.
- o Efficiently meets needed connections for treated water deliveries out of Skinner FWR.

Costs incurred by Metropolitan as a result of these actions would be:

- o Approximately \$9 million for planning, design, and construction of the Bypass, with a proposed on-line date of 2005.
- o An estimated cost to Metropolitan of approximately \$400,000 from accelerating the Bypass from 2005 to 2001-2.

Staff will bring appropriate documentation to the board in February for action on the planning, design, and construction of the proposed San Diego Pipeline No. 3 bypass. Such documentation will include more detailed identification of the costs, as well as quantification of regional benefits resulting from accelerating the proposed project.

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Attachment(s)

AFSANDIE/CORRES