

- **Board of Directors**
Engineering, Operations and Real Property Committee

February 13, 2001 Board Meeting

8-3

Subject

Authorize \$210,000 to complete Phase I of the Digital Microwave Services to Plants and Desert Facilities program (Appn. 15282)

Description

The Digital Microwave program includes two phases. The first phase provides digital microwave service to the desert pumping facilities. The second phase will address the telecommunication needs of Metropolitan's facilities in the coastal plain. As part of Phase I, all pumping plants except the recently completed Wadsworth pumping plant have been converted to digital microwave service. The digital microwave systems have proven to be more reliable and subject to fewer outages than leased lines from private telecommunication companies.

This board letter requests funding to provide digital telecommunication services to the Wadsworth pumping plant and Skinner filtration plant. The recommended alternative significantly reduces environmental impacts and will result in savings of approximately \$1.1 million from the original project estimate of \$1.54 million.

In August 1998, the Board authorized an increase in Appropriation No. 15282 (Board Action No. 2) in the amount of \$370,000 for the first phase of the Digital Microwave program. This increased the funded amount from \$2.549 million to \$2.919 million. The authorized work, which did not include the Wadsworth pumping plant and Skinner filtration plant, was completed under budget and approximately \$240,000 remains in the program appropriation.

Currently, telecommunication services are provided to the Wadsworth pumping plant and the Skinner filtration plant through a combination of aging analog microwave technology and less reliable leased lines costing about \$4,100 per month. A project to provide more reliable digital microwave telecommunication services to these facilities was originally included in the Inland Feeder program. The project called for construction of a permanent digital microwave station on top of Bachelor Mountain, located between the Skinner filtration plant and Diamond Valley Lake, consisting of a small building for the electronic equipment, a 65-foot tower with microwave dishes, road improvements for access to the facilities, and power line extensions. The presence of federally-listed threatened and endangered species at the Bachelor Mountain site and potential impacts to these species from the proposed project required the initiation of an Environmental Impact Report (EIR) and consultation with the U.S. Fish and Wildlife Service for development of a Habitat Conservation Plan (HCP). The original project budget was \$1.54 million, of which \$225,000 has been expended to date.

A reassessment of the project identified an alternate method to provide digital microwave service, which significantly reduces the overall cost and the environmental impacts of the project. The new alternative would construct a "passive" microwave relay station consisting of two six-foot-diameter dishes mounted back-to-back on an eight-foot monopole installed on a rock outcropping. The project estimate for this alternative, including previous expenditures, some related work at the Wadsworth pumping plant and funding for a preliminary scoping study for Phase II of the Digital Microwave program, is \$450,000. The new alternative saves approximately \$1.1 million when compared to the original project estimate of \$1.54 million. Since \$240,000 remains in the Digital Microwave program appropriation, an additional \$210,000 is needed to complete the work.

Because the proposed work benefits multiple facilities (e.g., Skinner filtration plant, Wadsworth pumping plant), staff proposes to transfer the project from the Inland Feeder program to the Digital Microwave program and make the necessary adjustments to the budgets/costs.

The proposed completion of the digital microwave communication facility at the Bachelor Mountain site qualifies for a Categorical Exemption under the California Environmental Quality Act (CEQA). The proposed project involves the new construction of a small structure with no potential for significant environmental impacts. As such, the proposed project qualifies for a Class 3 Categorical Exemption, as described in Section 15303 of the State CEQA Guidelines.

Policy

Metropolitan Water District Administrative Code Section 5108: Capital Project Appropriation

Board Options/Fiscal Impacts

Option #1

- a. Determine that the proposed action qualifies for a Categorical Exemption as a Class 3 project pursuant to CEQA and State CEQA Guidelines;
- b. Increase Appropriation 15282 by \$210,000 to a total of \$3,129,000; and
- c. Authorize staff to perform all work necessary to construct a “passive” microwave relay station on Bachelor Mountain, make related modifications at plants in the area, transfer the project from the Inland Feeder program to the Digital Microwave program, and prepare a preliminary scoping study for Phase II of the Digital Microwave program.

This option provides more reliable telecommunications to the Wadsworth pumping plant and Skinner filtration plant, reduces the program estimate to provide microwave services by approximately \$1.1 million, reduces the ongoing cost of leased lines by about \$4,100 per month, and significantly reduces environmental impacts.

Fiscal Impact: \$210,000 of additional capital program expenditures that were budgeted as part of the Inland Feeder program.

Option #2

- a. Cancel the digital microwave project at Bachelor Mountain and direct staff to continue to use leased lines from private telecommunication companies to provide service to plants in this area; and
- b. Authorize staff to prepare a preliminary scoping study for Phase II of the Digital Microwave Program using \$55,000 of the funds remaining in Appropriation 15282.

This option does not provide the benefits in cost reduction and increased reliability identified under Option #1.

Fiscal Impact: Annual Operations & Maintenance (O&M) expenditures of approximately \$50,000 for leased lines plus additional costs associated with inefficiencies resulting from less reliable telecommunication services.

Staff Recommendation

Option #1

 <hr/> Roy L. Wolfe Manager, Corporate Resources	1/24/2001 <hr/> Date
 <hr/> Ronald R. Jester General Manager	1/29/2001 <hr/> Date

Attachment 1 – Financial Statement

FINANCIAL STATEMENT

A breakdown of Board Action No. 3 for Appropriation No. 15282 to provide digital microwave services to plants and desert facilities is as follows:

	Board Action No. 2 <u>(August 1998)</u>	Board Action No. 3 <u>(February 2001)</u>
Metropolitan Labor	\$ 343,000	\$ 456,000
Materials & Supply	198,000	200,000
Professional & Technical	21,000	113,000
Operating Equipment & Incidentals	22,000	37,000
Administrative Overhead	195,000	227,000
Contracts including SCE	2,096,000	2,096,000
Remaining Budget	<u>44,000</u>	<u>0</u>
Total:	\$ 2,919,000	\$ 3,129,000

FUNDING REQUEST

Program Name: Digital Microwave Services to Plants & Desert Facilities			
Source of Funds: Pay-As-You-Go Fund			
Appropriation No.:	15282	Board Action No.:	3
Requested Amount:	\$210,000	Capital Program No.:	15282-A
Total Appropriated Amount:	\$3,129,000	Capital Program Page No.:	
Total Program Estimate:	\$4,808,000	Project Goal:	R-Reliability

PROGRAM SUMMARY

Budget Summary

Amount currently remaining in Appropriation 15282	\$240,000
Increase to Appropriation 15282 requested in this Board action	\$210,000
Total →	\$450,000

Expenditure Plan

Previous expenditures to be transferred from the Inland Feeder Program	\$225,000
Proposed expenditures for additional Bachelor Mountain and plant work	\$170,000
Proposed expenditures for detailed evaluation of proposed future work	\$ 55,000
Total →	\$450,000