

- **Board of Directors**
Engineering and Operations Committee

January 10, 2006 Board Meeting

9-1

Subject

Status report for the Inland Feeder Program for activities through November 2005 [**Any discussion of litigation to be heard in closed session. Conference with legal counsel--existing litigation (Shank/Balfour Beatty, a Joint Venture vs. Metropolitan Water District of Southern California, LASC Case No. BC 283438); to be heard in closed session pursuant to Gov. Code Section 54956.9(a). Conference with legal counsel--potential litigation relating to contractor claims on Contract No. 1542 for the Arrowhead Tunnels; to be heard in closed session pursuant to Gov. Code Section 54956.9(b) (one potential case)**]

Description

Work Completed to Date

The Inland Feeder Program consists of 44 miles of pipeline and tunnels that will allow Metropolitan to convey up to 1000 cfs of State project water from Devil Canyon Afterbay to Diamond Valley Lake. To date, eight construction contracts totaling \$542 million have been completed. These completed contracts represent 36.3 miles or 82% of the length of the Inland Feeder. Remaining work in the program includes completion of the two Arrowhead Tunnels which are presently under construction.

Arrowhead Tunnels

Arrowhead East Tunnel – The contractor performed alternating cycles of grouting and mining during the month of November. The tunnel boring machine (TBM) advanced a total of 510 feet in this month, while another 45 feet were mined within the first few weeks in December. The total mined to date is 10,140 feet (45% of the tunnel's length).

Arrowhead West Tunnel – The contractor performed alternating cycles of grouting and mining. The TBM advanced a total of 400 feet in November, while another 260 feet were mined within the first few weeks in December. The total mined to date is 4,590 feet (22% of the tunnel's length).

Program Management Team

As previously reported, Metropolitan and the Arrowhead Tunnels contractor made significant changes to their home-office and field management teams on this project. The new teams are actively engaged in identifying and jointly resolving project issues. Partnering sessions with staff will take place in mid-January 2006 with the goal of building teamwork and fostering cooperation among personnel at both the management and working levels on the project. It is anticipated that strategies and recommendations for completing the project will be presented at the February and March 2006 Board meetings. In addition, a financial review is under way to evaluate program costs to date.

Budget and Schedule

As of November 30, 2005, the projected cost to complete the Inland Feeder Program is \$980 million. Total expenditures through November 2005 are \$833.3 million (see [Attachment 1](#) for a budget comparison and schedule summary for the entire Inland Feeder Program, and budget status for the Arrowhead Tunnels construction contract). The board-approved Total Program Estimate for the entire program remains at \$1.186 billion.

The on-line date for the Inland Feeder is dependent upon completion of the Arrowhead Tunnels. The estimated completion date of late 2008 for the Arrowhead Tunnels was reported to the Board in October 2005. However, due to project delays, the completion date is currently under review. A revised project completion date, and costs associated with the schedule impacts, will be brought to the Board in March 2006.

Upon completion of construction, environmental mitigation measures will continue along the Arrowhead Tunnels alignment for up to two years in accordance with the Environmental Impact Report.

Policy

Board request

Fiscal Impact

Refer to [Attachment 1](#).



Roy L. Wolfe
Manager, Corporate Resources

1/4/2006
Date



Debra C. Man
Interim CEO/General Manager

1/4/2006
Date

Attachment 1 – Inland Feeder Program Budget Comparison and Schedule Summary, and Arrowhead Tunnels Construction Contract Budget Status

BLA #4163

Inland Feeder Program Budget Comparison and Schedule Summary (\$ in Millions)				
	Total Program Estimate (FY 2005/6 CIP)	Projected Cost to Complete (Updated Nov 2005)	Expenditures to Date (Nov 2005)	% Complete Based on Expenditures (Nov 2005)
<u>Active Construction</u>				
Arrowhead Tunnels	\$ 289.3	\$ * 265.0	\$ 143.6	50%
Construction Inspection and Support	\$ 39.1	\$ * 39.1	\$ 23.0	59%
Subtotal, Active Construction	\$ 328.4	\$ 304.1	\$ 166.6	51%
<u>Other Components</u>				
Right-of-Way and Land	\$ 50.1	\$ 50.1	\$ 49.9	99%
Environmental Planning/Mitigation	\$ 18.6	\$ 18.6	\$ 14.2	76%
Program Management	\$ 32.4	\$ 32.4	\$ 29.5	91%
Completed Projects	\$ 575.4	\$ 574.8	\$ 573.1	100%
Subtotal, Other Components	\$ 676.5	\$ 675.9	\$ 666.7	99%
Expended To Date			\$ 833.3	
Subtotal, All Projects	\$ 1,004.9	\$ 980.0		
Remaining Budget	\$ 181.5	\$ 206.4		
Total Program Estimate	\$ 1,186.4	\$ 1,186.4		

* Under review

NOTE: Overall completion = 36.3 of 44 miles (82%)

Arrowhead Tunnels Construction Contract Budget Status (\$ in Millions)			
Construction Contract No. 1542	Current Contract Amount (Nov 2005)	Amount of Budget Committed (Nov 2005)	% of Budget Committed
Mobilization	\$ 7.4	\$ 7.1	95.9%
Plant equipment / materials	\$ 82.1	\$ 65.8	80.1%
<u>Arrowhead East</u>			
Portal / pipeline work	\$ 11.1	\$ 6.7	60.4%
Excavation / final lining	\$ 72.4	\$ 37.3	51.5%
Grouting	\$ 11.6	\$ 1.6	13.8%
<u>Arrowhead West</u>			
Portal / pipeline work	\$ 6.8	\$ 1.6	23.5%
Excavation / final lining	\$ 56.5	\$ 25.8	45.7%
Grouting	\$ 12.3	\$ 7.5	61.0%
Construction Contract Total	\$ 260.2	\$ 153.4	59.0%
Length of Tunnels Mined			
Arrowhead East	10,140 ft of 22,708 ft (45%)		
Arrowhead West	4,590 ft of 21,303 ft (22%)		
Total	14,730 ft of 44,011 ft (33%)		

NOTE: Contractor invoices paid through November 2005 = \$143.6M