

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

January 13, 2004 Board Meeting

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10-1

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**Subject**

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Status report for the Inland Feeder Program for activities through November 2003 [**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. BC283438); to be heard in closed session pursuant to Gov. Code § 54956.9(a)**]

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**Description**

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**Arrowhead Tunnels (new contract)**

Primary support segment fabrication continued at the Palmdale plant with quantities completed to sufficiently line approximately 7,405 feet of the tunnel.

Arrowhead East Tunnel – Tunnel boring machine (TBM) mining began on August 18, 2003. Through November, 1,690 feet have been mined. No groundwater has been encountered to date.

Arrowhead West Tunnel – TBM mining began on October 20, 2003. Through November, 115 feet have been mined. Pre-excavation grouting operations are being performed on the third work-shift to control groundwater which has been present from the start of mining. Due to delays in completing mobilization activities, construction is approximately 40 days behind schedule.

**Arrowhead East & West Tunnels – Reaches 1 & 2 (completed contracts)**

It has been reported for several months that Metropolitan is seeking to verify Shank/Balfour Beatty's claimed costs regarding delay and deletion of mining. Metropolitan's attempts to settle the claims have been unsuccessful. Shank/Balfour Beatty filed litigation in Superior Court in Los Angeles County in October 2002. Discovery has commenced and the parties have exchanged documents. Depositions commenced in mid-October. A mediation of this matter is scheduled for December 11 and 12, 2003. If mediation is not successful the trial is scheduled to begin on March 30, 2004.

**Highland Pipeline – Reach 3**

The contractor has installed approximately 27,800 feet of this 28,000-foot pipeline (99 percent). The contractor continues working in the City Creek area. Work continues on the street improvements along Boulder Avenue and is scheduled for completion in December 2003. At the November meeting, the Board authorized an increase in change orders to L. H. Woods and Sons, Inc., from \$2.34 million (5% of original contract value) to \$4.34 million to construct a connection between San Bernardino Valley Municipal Water District's (SBVMWD) Foothill Feeder and the Program's Highland Pipeline. Staff has negotiated the change order and work is scheduled to begin in December 2003. The total cost for the connection, including construction management, is \$2.3 million.

**Budget and Schedule**

As a result of the new SBVMWD connection, the projected cost for the Inland Feeder Program increased by \$2.3 million to \$951.5 million. Claims associated with the deletion of work for the original Arrowhead East and West Tunnels contracts are pending and excluded from the estimated total project cost. Claims pending for the Arrowhead East and West Tunnels are \$5.3 million and \$15.8 million, respectively. A \$429,000 claim for the completed Riverside Badlands Tunnel is also pending.

Total expenditures through November 2003 are \$688.6 million (see [Attachment 1](#) for a budget comparison and schedule summary and [Attachment 2](#) for the Arrowhead Tunnels financial status). The board-approved budget remains unchanged at \$1.186 billion. The projected on-line date for the Inland Feeder is scheduled for 2007 depending upon the level of grouting that will be required on the Arrowhead Tunnels. 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

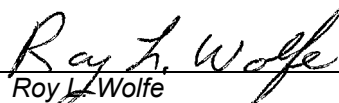
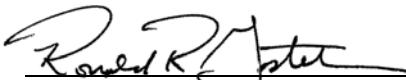
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Board request

## Fiscal Impact

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Refer to [Attachment 1](#) and [Attachment 2](#).

 Roy L. Wolfe Manager, Corporate Resources	12/15/2003 Date
 Ronald R. Gastelum Chief Executive Officer	12/22/2003 Date

[Attachment 1 – Budget Comparison and Schedule Summary](#)

[Attachment 2 – Arrowhead Tunnels Financial Status](#)

BLA #2452

**Inland Feeder Program  
Budget Comparison and Schedule Summary**

	BUDGET (Nov-03)	PROJECTED COST (Nov-03)	ACTUALS THRU (Nov-03)	PROGRESS		COMPLETION DATE		COMMENTS
				PLANNED % COMPLETE	ACTUAL % COMPLETE (Nov-03) (1)	CONTRACT (2) (3)	FORECAST (Nov-03) (3)	
<b><u>Active Construction</u></b>								
Arrowhead Tunnels	\$ 302,567,000	\$ 283,009,000	\$ 41,698,000	29%	18%	Sep-06	Sep-06	Under construction
Highland Pipeline	\$ 55,137,000	\$ 54,426,000	\$ 48,309,000	63%	96%	Sep-04	May-04	Under construction
<b><u>Construction Support</u></b>								
Right-of-Way and Land	\$ 49,072,000	\$ 49,072,000	\$ 48,442,000	-----	99%	-----	-----	-----
Environmental Planning/Mitigation	\$ 18,598,000	\$ 18,598,000	\$ 13,066,000	-----	70%	-----	-----	-----
Program Management	\$ 32,401,000	\$ 32,401,000	\$ 25,180,000	-----	78%	-----	-----	-----
Arrowhead Tunnels Claims Cost	\$ 950,000	\$ 950,000	\$ 123,000	-----	13%	-----	-----	-----
<b><u>Completed Projects</u></b>								
Arrowhead West Tunnel Constr. (4)	\$ 43,950,000	\$ 43,883,000	\$ 43,878,000	-----	100%	-----	-----	-----
Arrowhead East Tunnel Constr. (4)	\$ 121,753,000	\$ 121,753,000	\$ 121,046,000	-----	100%	-----	-----	-----
Arrowhead Tunnels Design	\$ 29,380,000	\$ 29,380,000	\$ 29,380,000	-----	100%	-----	-----	-----
Mentone Pipeline	\$ 32,112,000	\$ 32,112,000	\$ 31,888,000	-----	100%	-----	-----	-----
Highland/Mentone Pipeline Design	\$ 16,122,000	\$ 16,121,000	\$ 16,121,000	-----	100%	-----	-----	-----
Riverside Badlands Tunnel (5)	\$ 144,931,000	\$ 144,931,000	\$ 144,807,000	-----	100%	-----	-----	-----
Riverside North Pipeline	\$ 55,713,000	\$ 55,713,000	\$ 55,713,000	-----	100%	-----	-----	-----
Riverside South Pipeline	\$ 42,418,000	\$ 42,418,000	\$ 42,418,000	-----	100%	-----	-----	-----
Inland Feeder Study / Initial Planning	\$ 8,024,000	\$ 8,024,000	\$ 8,024,000	-----	100%	-----	-----	-----
Owner Controlled Insurance Program	\$ 18,700,000	\$ 18,700,000	\$ 18,538,000	-----	99%	-----	-----	-----
<b>Expended To Date</b>			<b>\$ 688,631,000</b>					
<b>Total Cost To Complete</b>	<b>\$ 971,828,000</b>	<b>\$ 951,491,000</b>						
<b>Remaining Budget</b>	<b>\$ 214,632,000</b>	<b>\$ 234,969,000</b>						
<b>Total Approved Budget</b>	<b>\$ 1,186,460,000</b>	<b>\$ 1,186,460,000</b>						

(1) Based on work completed for construction reaches and \$ expended for construction support.

(2) Based on original contract duration and approved extensions.

(3) Completion date for Arrowhead Tunnels does not include time for grouting.

(4) Budget does not include Contractor Claims of \$5.3M and \$15.8M for the Arrowhead East Tunnel and Arrowhead West Tunnel, respectively.

(5) Will reduce budget to equal actuals following resolution of Contractors Claim of \$500K. Unused budget to be transferred to Remaining Budget category.

NOTE: Overall completion = 36 of 44 miles (82%)

**Inland Feeder Program**  
**Arrowhead Tunnels Financial Status**  
(\$ in Millions)

<b>Construction Contract No. 1542</b>	<b>Budget November - 2003</b>	<b>Committed November - 2003</b>	<b>% of Budget Committed</b>
Mobilization	\$ 7.4	\$ 6.1	82.4%
Plant equipment / materials	\$ 62.1	\$ 24.9	40.1%
<u>Arrowhead East</u>			
Portal / pipeline work	\$ 11.0	\$ 6.2	56.4%
Excavation / final lining	\$ 64.1	\$ 5.5	8.6%
Grouting	\$ 11.6	\$ -	
<u>Arrowhead West</u>			
Portal / pipeline work	\$ 6.7	\$ 1.3	19.4%
Excavation / final lining	\$ 67.9	\$ 0.3	0.4%
Grouting	\$ 11.6	\$ -	
Construction Contract Total	<u>\$ 242.4</u>	<u>\$ 44.3</u>	<u>18.3%</u>

NOTE: Invoices paid to date = \$40.3 million