

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

February 8, 2005 Board Meeting

9-1

Subject

Status report for the Inland Feeder Program for activities through December 2004 [**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

New Developments

Arrowhead East Tunnel – The contractor re-started mining operations on January 13, 2005, and progress has been steady. From January 13 through January 20, over 120 feet of mining took place in the Arrowhead East Tunnel for a total of 5,930 feet mined to date.

Arrowhead West Tunnel – From January 1 through 12, the tunnel boring machine advanced another 145 feet for a total of 2,085 feet mined to date.

Arrowhead Tunnels (ongoing)

Arrowhead East Tunnel – As reported last month, a void in the geologic formation was encountered at the tunnel face on November 1, 2004. A bulkhead was built to stabilize the face and fill the void with grout. A pre-excitation grouting cycle began on November 2, 2004 and was temporarily halted in order to drill drain holes to relieve water pressure and ensure stabilization of the tunnel face. On November 4, 2004, the contractor ceased mining activities in the Arrowhead East Tunnel. On December 1, 2004, the contractor resumed mining activities that entailed the continuation of pre-excitation grouting to stabilize the face. Pre-excitation grouting continued through the end of December.

Arrowhead West Tunnel – A pre-excitation grouting cycle was performed from December 4 through 13. Mining resumed on December 14 and advanced another 155 feet through the end of the month.

The next pre-excitation grouting cycle in Arrowhead West Tunnel is being performed by the contractor using his own means and methods. The goal is to develop methods that will accelerate future grouting cycles. Metropolitan will compensate contractor for the work at unit rates set forth in the contract. A total of 1,940 feet (10.9 percent) has been mined through December.

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

The Board approved a partial settlement at its May 2004 meeting of the pending litigation relating to the previous contracts. All claims of Shank/Balfour Beatty and its subcontractors Coast Geo and IAFD, as well as a pending Government Code Claim relating to the Riverside Badlands Tunnel, have been settled. The only remaining issues in the pending litigation are the claims by the pipe vendor, Ameron, in the amount of approximately \$11.5 million. On May 17, 2004, Metropolitan filed a cross-complaint against Ameron, alleging the submission of false claims. The trial began on September 22, 2004. Final arguments were completed on December 22, 2004.

Final briefing will be completed no later than January 14, 2005. The court has 60 days after completion of the trial to render a decision.

Budget and Schedule

The projected cost at completion for the Inland Feeder Program is \$957.3 million, excluding costs for pending claims on the original Arrowhead Tunnels contract and the Highland Pipeline contract. Due to the confidentiality of recently settled claims with Shank/Balfour Beatty, the original Arrowhead Tunnels contractor, the costs associated with these claims will be added to the program's projected cost upon resolution of the Ameron claim.

Total expenditures through December 2004 are \$759.7 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 on-line date for the Inland Feeder is dependent upon the completion of the Arrowhead Tunnels. The Arrowhead Tunnels completion date has previously been estimated at late 2007. However, due to project delays, including the major flood at Christmas 2003, and the amount of pre-excavation grouting for the control of groundwater projected over the length of remaining tunnel, the completion date is currently estimated at 2008. Pre-excavation grouting will likely continue to have a significant impact on project completion as the tunnels advance. Any changes to the project completion date, and costs associated with the schedule impacts, will be brought to the Board as new information becomes available.

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](#) and [Attachment 2](#).


 Roy L. Wolfe
 Manager, Corporate Resources

1/21/2005
 Date


 Gilbert F. Ivey
 Interim Chief Executive Officer

1/21/2005
 Date

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

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

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

	BUDGET (Dec-04)	PROJECTED COST (Dec-04)	ACTUALS THRU (Dec-04)	PROGRESS		COMPLETION DATE		COMMENTS
				PLANNED % COMPLETE	ACTUAL % COMPLETE (Dec-04) (1)	CONTRACT (2) (3)	FORECAST (Dec-04) (3)	
<u>Active Construction</u>								
Arrowhead Tunnels	\$ 303,517,000	\$ 287,421,000	\$ 101,565,000	66%	37%	Mar-07	Nov-08	Under construction
Highland Pipeline	\$ 55,337,000	\$ 55,050,000	\$ 54,855,000	100%	100%	Sep-04	-----	Performing Contract Close-out
<u>Construction Support</u>								
Right-of-Way and Land	\$ 50,172,000	\$ 50,172,000	\$ 48,702,000	-----	97%	-----	-----	-----
Environmental Planning/Mitigation	\$ 18,598,000	\$ 18,598,000	\$ 13,885,000	-----	75%	-----	-----	-----
Program Management	\$ 32,401,000	\$ 32,401,000	\$ 27,538,000	-----	85%	-----	-----	-----
<u>Completed Projects</u>								
Arrowhead West Tunnel Constr. (4)	\$ 44,563,000	\$ 44,495,000	\$ 44,492,000	-----	100%	-----	-----	-----
Arrowhead East Tunnel Constr. (4)	\$ 121,753,000	\$ 121,753,000	\$ 121,420,000	-----	100%	-----	-----	-----
Arrowhead Tunnels Design	\$ 29,380,000	\$ 29,381,000	\$ 29,381,000	-----	100%	-----	-----	-----
Mentone Pipeline	\$ 32,112,000	\$ 32,112,000	\$ 32,018,000	-----	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	\$ 144,968,000	-----	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	\$ 18,557,000	-----	99%	-----	-----	-----
Expended To Date			\$ 759,656,000					
Total Cost To Complete	\$ 973,741,000	\$ 957,290,000						
Remaining Budget	\$ 212,719,000	\$ 229,170,000						
Total Approved Budget	\$ 1,186,460,000	\$ 1,186,460,000						

(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) Actuals exceed budget due to an inappropriate charge. Cost transfer is pending.

NOTE: Overall completion = 37 of 44 miles (84%)

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

Construction Contract No. 1542	Budget Dec - 2004	Committed Dec - 2004	% of Budget Committed
Mobilization	\$ 7.4	\$ 6.7	90.5%
Plant equipment / materials	\$ 76.3	\$ 49.6	65.0%
<u>Arrowhead East</u>			
Portal / pipeline work	\$ 11.1	\$ 6.6	59.5%
Excavation / final lining	\$ 67.4	\$ 16.1	23.9%
Grouting	\$ 11.6	\$ 0.3	2.6%
<u>Arrowhead West</u>			
Portal / pipeline work	\$ 6.8	\$ 1.6	23.5%
Excavation / final lining	\$ 54.6	\$ 6.6	12.1%
Grouting	\$ 11.6	\$ 2.5	21.6%
Construction Contract Total	\$ 246.8	\$ 90.0	36.5%

NOTE: Invoices paid through December 2004 = \$86.7 million