

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

July 12, 2005 Board Meeting

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9-1

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**Subject**

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Status report for the Inland Feeder Program for activities through May 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)**]

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**Description**

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**Arrowhead Tunnels**

Arrowhead East Tunnel – The contractor performed alternating cycles of grouting and tunnel boring machine (TBM) mining during the month. A total of 330 feet were mined during May bringing the total mined to date to 7,445 feet (33%).

Arrowhead West Tunnel – The contractor completed work on replacement of the TBM's screw auger and installation of other previously planned TBM enhancements. On May 2, mining resumed and progressed 10 feet before a 12-day pre-excitation grouting was required. Through May, the contractor mined a total of 90 feet bringing the total to date to 2,660 feet (13%).

**Budget and Schedule**

As of May 31, 2005, the projected cost at completion for the Inland Feeder Program is \$976.2 million. With the recent resolution of the Ameron claim, all costs for the original Arrowhead Tunnels contract are now included in the Program's projected cost.

Total expenditures through May 2005 are \$795.6 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 on-line date for the Inland Feeder is dependent upon the completion of the Arrowhead Tunnels. The Arrowhead Tunnels completion date has been previously estimated at late 2007. However, due to project delays, including the major flood on Christmas 2003, the completion date is currently estimated at late 2008. Pre-excitation grouting will likely continue to have an 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.

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**Policy**

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Board request

**Fiscal Impact**

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

  
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Roy L. Wolfe  
Manager, Corporate Resources

6/20/2005  
Date

  
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Dennis B. Underwood  
CEO/General Manager

6/20/2005  
Date

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

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

BLA #3247

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

	BUDGET (May-05)	PROJECTED COST (May-05)	ACTUALS THRU (May-05)	PROGRESS		COMPLETION DATE		COMMENTS
				PLANNED % COMPLETE	ACTUAL % COMPLETE (May-05) (1)	CONTRACT (2) (3)	FORECAST (May-05) (3)	
<b><u>Active Construction</u></b>								
Arrowhead Tunnels	\$ 334,727,000	\$ 306,256,000	\$ 135,432,000	72%	42%	Mar-07	Nov-08	Under construction
Highland Pipeline	\$ 55,337,000	\$ 55,092,000	\$ 54,902,000	100%	100%	Sep-04	-----	Performing Contract Close-out
<b><u>Construction Support</u></b>								
Right-of-Way and Land	\$ 50,172,000	\$ 50,172,000	\$ 49,765,000	-----	99%	-----	-----	-----
Environmental Planning/Mitigation	\$ 18,598,000	\$ 18,598,000	\$ 14,016,000	-----	75%	-----	-----	-----
Program Management	\$ 32,401,000	\$ 32,401,000	\$ 28,492,000	-----	88%	-----	-----	-----
<b><u>Completed Projects</u></b>								
Arrowhead West Tunnel Constr.	\$ 44,563,000	\$ 44,496,000	\$ 44,492,000	-----	100%	-----	-----	-----
Arrowhead East Tunnel Constr.	\$ 121,753,000	\$ 121,753,000	\$ 121,421,000	-----	100%	-----	-----	-----
Arrowhead Tunnels Design	\$ 29,380,000	\$ 29,381,000	\$ 29,381,000	-----	100%	-----	-----	-----
Mentone Pipeline	\$ 32,112,000	\$ 32,112,000	\$ 32,030,000	-----	100%	-----	-----	-----
Highland/Mentone Pipeline Design	\$ 16,122,000	\$ 16,121,000	\$ 16,121,000	-----	100%	-----	-----	-----
Riverside Badlands Tunnel	\$ 144,931,000	\$ 144,931,000	\$ 144,908,000	-----	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	\$ 18,475,000	-----	99%	-----	-----	-----
<b>Expended To Date</b>			<b>\$ 795,588,000</b>					
<b>Total Cost To Complete</b>	<b>\$ 1,004,951,000</b>	<b>\$ 976,168,000</b>						
<b>Remaining Budget</b>	<b>\$ 181,509,000</b>	<b>\$ 210,292,000</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.

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

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

<b>Construction Contract No. 1542</b>	<b>Budget May - 2005</b>	<b>Committed May - 2005</b>	<b>% of Budget Committed</b>
Mobilization	\$ 7.4	\$ 7.0	94.6%
Plant equipment / materials	\$ 82.1	\$ 61.5	74.9%
<u>Arrowhead East</u>			
Portal / pipeline work	\$ 11.1	\$ 6.7	60.4%
Excavation / final lining	\$ 69.6	\$ 24.4	35.1%
Grouting	\$ 11.6	\$ 1.2	10.3%
<u>Arrowhead West</u>			
Portal / pipeline work	\$ 6.8	\$ 1.6	23.5%
Excavation / final lining	\$ 55.7	\$ 12.5	22.4%
Grouting	\$ 11.6	\$ 5.8	50.0%
Construction Contract Total	\$ 255.9	\$ 120.7	47.2%

NOTE: Invoices paid through May 2005 = \$113.6 million