



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

October 13, 2009 Board Meeting

9-1

Subject

Status report for the Inland Feeder Program for activities through August 2009

Description

Work Completed to Date

The Inland Feeder Program consists of 44 miles of pipelines and tunnels that will enable Metropolitan to convey up to 1,000 cubic feet per second of State Water Project (SWP) supplies from Devil Canyon Afterbay to Diamond Valley Lake (DVL). To date, eight of nine construction contracts totaling \$542 million have been completed. These completed contracts represent 36.3 miles or 82 percent of the Inland Feeder's length. Principal remaining work includes completion of the Arrowhead East and West Tunnels, which are presently under construction by a joint venture of Shea-Kenny.

Due to recent increases in allotments of SWP supplies to Metropolitan, it is expected that initial deliveries through the Inland Feeder in late September 2009 or early October (once the Arrowhead tunnels are completed) will range up to 800 cfs.

Arrowhead Tunnels

Arrowhead East Tunnel (AET) – In August, the contractor completed installation of the remaining sections of 12-foot-diameter pipe outside the tunnel at Strawberry Creek, which connects the tunnel to the eastern end of the previously constructed pipeline running between the AET and AWT. Mortar lining of the welded steel pipe in the initial 400 feet of tunnel at Strawberry Creek portal was also completed. Work continued on the Strawberry Creek portal grading, drainage, and access roads. At the City Creek portal, the contractor completed mortar lining of the welded steel pipe, while restoration of the muck disposal site continued.

Arrowhead West Tunnel (AWT) – In August, the contractor completed all tunnel clean-up activities and commenced concrete mortar lining operations at Devil Canyon portal. Work was completed on the installation of the remaining sections of 12-foot-diameter pipe outside the tunnel at Waterman Canyon, which connects the tunnel to the western end of the previously constructed pipeline running between the AET and AWT. Construction continued on the access structure at the Waterman Canyon portal while installation of mechanical equipment at the Devil Canyon access structure was completed. The contractor continued to demobilize equipment at the Waterman Canyon portal area, including the removal of the electrical substation. Site grading and portal backfill work were initiated in August.

Budget and Schedule

The AET and AWT are on virtually identical schedules, with final completion of the construction contract expected in early 2010. This date is approximately six months ahead of the September 2010 target established in August 2006 with the revised contract. Staff presently anticipates that the tunnel will be ready for water deliveries by October 2009. Follow-on activities including site grading and landscaping will be completed in early 2010.

There are currently two pending eminent domain actions to acquire property rights from Campus Crusade for Christ. The first action commenced in 1997 and resulted in a favorable judgment for Metropolitan following a court trial in 2003. That judgment was reversed on appeal to the California Supreme Court, and the case was

remanded in 2007 for a retrial. Metropolitan is engaged in extensive discovery and preparation of expert witnesses for the retrial. At this time, no date for the retrial has been set. In December 2008, the Legal Department filed a second eminent domain action to acquire an additional 4-year construction easement over 7.5 acres of land at the AWT Waterman Canyon portal. On April 30, 2009, the trial court issued a stay of this case pending the resolution of the first eminent domain action. Because the final amount of compensation owed to Campus Crusade is dependent on court decisions, the total cost for these actions are unknown and are not reflected in the updated total projected cost for the Inland Feeder as discussed below. As court decisions are rendered and costs are finalized, staff will inform the Board. No additional funds are required to be appropriated, as sufficient funds are available within the program's Remaining Budget.

Following board authorization of a settlement agreement and contract amendment with the Arrowhead Tunnels contractor in August 2006, staff conducted a complete review of the program budget to estimate the total projected cost to complete the Inland Feeder Program. Based on the revised September 2010 completion date for the Arrowhead Tunnels as presented to the Board in August 2006, the updated total projected cost for the Inland Feeder is estimated to be \$1.146 billion. Total expenditures through August 2009 are \$1.108 billion (see [Attachment 1](#) for the Projected Cost/Expenditures). The board-approved budget for the entire program remains at \$1.186 billion. [Attachment 2](#) shows the cash flow for the Arrowhead Tunnels construction contract compared to the planned progress and expenditures set forth in the August 2006 contract amendment.

The payments on the contractor's incentive/risk program are discussed with the Board on a regular basis at the Engineering and Operations Committee meetings. This incentive plan is part of the contract amendment approved by the Board in August 2006. The incentive payment to the contractor for the month of July 2009 is shown in [Attachment 1](#).

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

Policy

Submitted per request of the Board


 Roy L. Wolfe
 Manager, Corporate Resources

9/22/2009

Date


 Jeffrey Kightlinger
 General Manager

9/28/2009

Date

[Attachment 1 – Inland Feeder Program Projected Cost/Expenditures and Incentive Plan Payments](#)

[Attachment 2 – Actual vs. Planned Cash Flow](#)

BLA #6798

Inland Feeder Program Projected Cost/Expenditures (\$ in Millions)				
	Projected Cost To Complete (Updated Aug 2009)	Expenditures This Month (Aug 2009)	Expenditures To Date (Aug 2009)	% Complete Based on Expenditures (Aug 2009)
<u>Active Construction</u>				
Arrowhead Tunnels Const. Contract	\$ 397.0	\$ 4.1	\$ 369.3	93%
Construction Inspection and Support	\$ 58.0	\$ 0.1	\$ 54.6	94%
Subtotal, Active Construction	\$ 455.0	\$ 4.2	\$ 424.0	93%
<u>Other Components</u>				
Completed Projects	\$ 578.9	\$ 0.1	\$ 575.1	99%
Others (R/W, Env., Prog. Mgmt.)	\$ 112.3	\$ 0.1	\$ 109.0	97%
Subtotal, Other Components	\$ 691.2	\$ 0.2	\$ 684.1	99%
Expended To Date		\$ 4.5	\$ 1,108.1	93%
Subtotal, All Projects	\$ 1,146.2	← Projected Cost to Complete		
Remaining Budget	\$ 40.3			
Board-Authorized Budget	\$ 1,186.5	← Total Project Budget		

NOTE: Contractor invoices paid through August 2009 = 366.6M
 Overall completion = 36.3 of 44.2 miles (82%)

Inland Feeder Program – Arrowhead Tunnels Incentive Plan Payments				
	<u>East Tunnel</u>	<u>West Tunnel (1)</u>	<u>Total</u>	
June 2006 – June 2009 (Previously Reported)	\$ 3,470,350	\$ 4,258,207	\$ 7,728,557	
July 2009 (3)	\$ 68,813	\$ 63,488	\$ 132,301	
TOTALS	\$ 3,539,163	\$ 4,321,695	\$ 7,860,858 (2)	

(1): For Arrowhead West Tunnel, incentive program evaluation commenced in June 2006.
 (2): Percent of maximum possible combined incentive: 77% (70% Arrowhead East Tunnel, 84% Arrowhead West Tunnel)
 (3): Incentive Plan based on work performed during contractor monthly pay period from 6/26/09 to 7/25/09 (differs from progress in calendar month)

Arrowhead Tunnels Actual vs. Planned Cash Flow

