

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

December 14, 2004 Board Meeting

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9-2

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**Subject**

Authorize an amendment to the existing agreement with the United States Forest Service for reimbursement of staff support on the Arrowhead Tunnels by increasing the maximum compensation from \$3 million to \$5 million

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**Description**

The Arrowhead Tunnels portion of the Inland Feeder is located in the San Bernardino Mountains. It stretches from Devil Canyon Portal, located north of the city of San Bernardino, to City Creek, located north of the city of Highland. See [Attachment 1](#) for the Location Map. It consists of two separate tunnels: the Arrowhead West Tunnel (AWT) and Arrowhead East Tunnel (AET). The AWT and AET are 3.8 and 5.7 miles in length, respectively. Both tunnels pass through a variety of challenging ground and geological conditions, including high groundwater pressures. Tunnel depths reach up to 2,000 feet below the ridgeline.

In April 1997 and June 1998, construction contracts were awarded for the AET and the AWT, respectively. Metropolitan halted mining in April 1999 due to concerns from the United States Forest Service (USFS), the permitting agency, and the San Manuel Band of Mission Indians (the "Tribe") about the amount of groundwater inflows into the tunnel. An intensive grouting program subsequently reduced inflows.

After suspending tunneling operations in 1999, Metropolitan worked closely with the USFS, the Tribe's representatives and consultants, and other technical experts to improve the design and construction techniques to minimize short term impacts on the local groundwater table from tunnel construction. The collaborative effort among Metropolitan, the USFS, and the Tribe led to an improved design for construction of the Arrowhead Tunnels which incorporated state-of-the-art techniques that will minimize the groundwater inflows during construction. The USFS amended Metropolitan's special use permit in July 2001 to incorporate these improved design techniques.

The USFS staff will continue to support the Arrowhead Tunnels project through the completion of construction. The USFS staff support includes: review of groundwater monitoring programs, development of groundwater models, review of tunnel inflow criteria, monitoring of mining activities, and monitoring of environmental mitigation programs. The Arrowhead Tunnels completion date was originally 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.

The purpose of the reimbursement agreement with the USFS is to compensate the USFS staff in working with Metropolitan on groundwater issues and for monitoring completion of the tunnels. It is common for federal agencies to require reimbursement for staff time spent on specific projects. In September 2002, Metropolitan amended the existing agreement with the USFS from \$1.8 million to the current level of \$3 million. Through August 2004, \$2.75 million has been expended under this agreement. Based on previous and current USFS staffing levels, it is now estimated that an agreement amount of \$5 million should be sufficient to complete the project. However, anticipated staffing levels could vary depending on the USFS's required involvement during construction.

Funds for the USFS staff support were originally included in the project budget in the amount of \$3.5 million. However, the additional \$1.5 million is available within the remaining budget category and will not increase the

approved program budget of \$1.186 billion. This action authorizes an amendment to the agreement with the USFS to increase the maximum reimbursable fee to an amount not to exceed \$5 million.

## **Policy**

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Metropolitan Water District Administrative Code § 8115: Negotiated Contracts

## **California Environmental Quality Act (CEQA)**

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CEQA determination for Staff Recommendation:

The original environmental effects from the construction of the Arrowhead Tunnels project were evaluated in the Inland Feeder Project (i.e., Inland Feeder Program) Final Environmental Impact Report and Environmental Assessment (Final EIR/EA), which was certified by Metropolitan's Board of Directors in February 1993. The Board also approved the Findings of Fact, the Mitigation Monitoring and Reporting Program, the Statement of Overriding Considerations, and the Inland Feeder Program. The present proposed board action is solely based on authorizing compensation to the USFS for expenses associated with the Arrowhead Tunnels project, as part of the Inland Feeder Program. The overall construction methodology design, funding and operations for the Arrowhead Tunnels project remain consistent with the impacts analyzed in the original 1993 certified FEIR/EA. Hence, the previous environmental documentation taken by the Board in conjunction with the proposed action fully complies with CEQA and the State CEQA Guidelines. As such, no further environmental documentation is necessary for the Board to act on the proposed action.

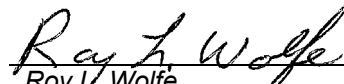
The CEQA determination is: Determine that the proposed action has been previously addressed in the 1993 certified Final EIR/EA and that no further environmental analysis or documentation is required.

## **Staff Recommendation**

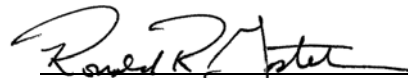
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Adopt the CEQA determination and authorize an amendment for an increase from \$3 million to \$5 million to the agreement with the USFS for reimbursable staff time on the Arrowhead Tunnels portion of the Inland Feeder Program to an amount not to exceed \$5 million.

**Fiscal Impact:** \$5 million of budgeted and previously appropriated funds under existing Approp. 15122

  
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Roy J. Wolfe  
Manager, Corporate Resources

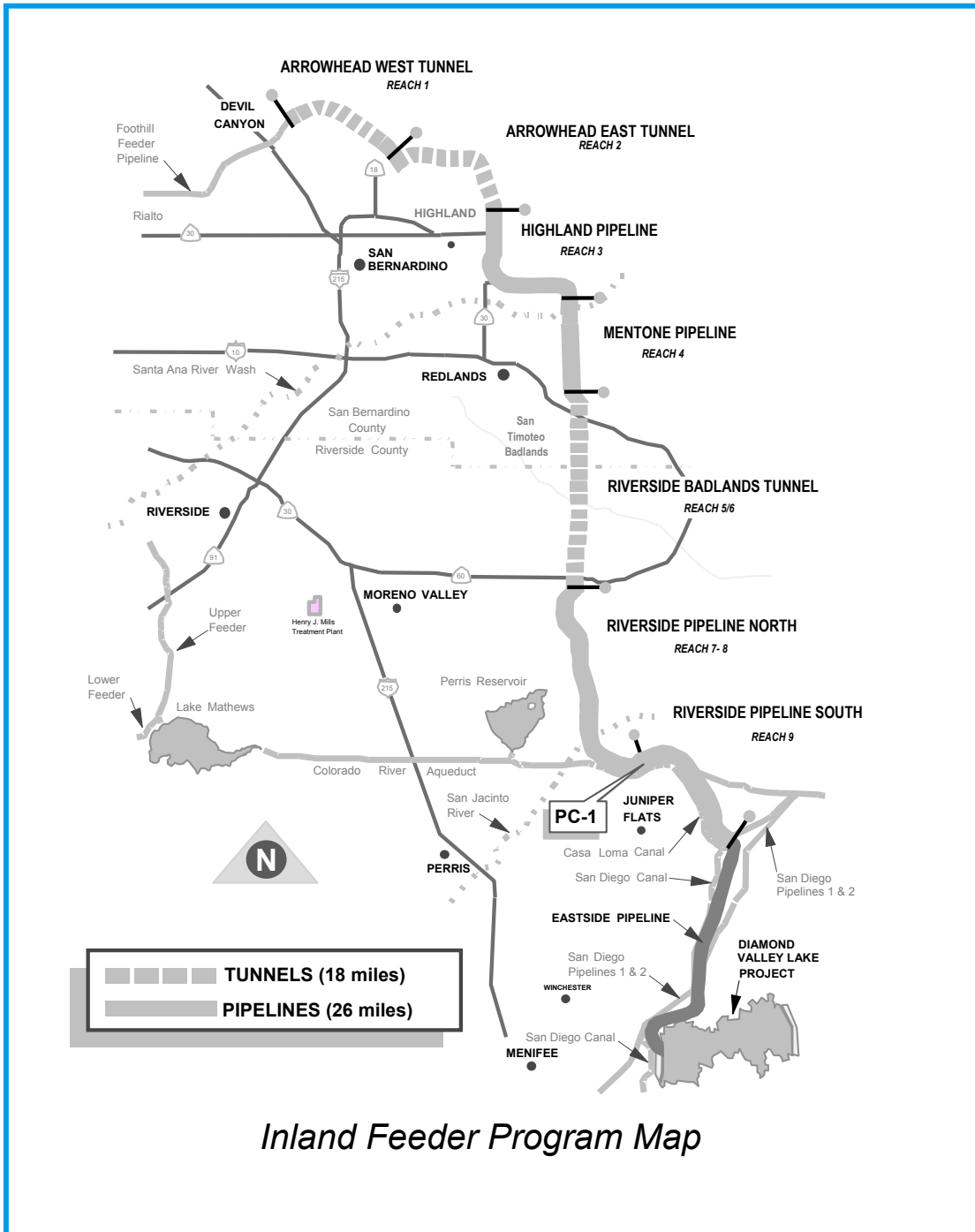
11/19/2004  
Date

  
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Ronald R. Gastelum  
Chief Executive Officer

11/19/2004  
Date

## **Attachment 1 – Location Map**

BLA #3193



General Location Map