



## Legislation Details (With Text)

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**Title:** Approve a Memorandum of Understanding Regarding Coordination, Cooperation, and Cost Sharing On Preconstruction Activities Related to the Temperance Flat Reservoir Project for a Total of \$500,000 to be Expended During Fiscal Years 2018, 2019, and 2020.  
**Sponsors:** Department of Public Utilities  
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**Attachments:** 1. MOU Temperance Flat Reservoir Project - Funding for Pre-Construction Activities - Final.pdf

Date	Ver.	Action By	Action	Result
11/2/2017	1	City Council	approved	

## REPORT TO THE CITY COUNCIL

**November 2, 2017**

**FROM:** THOMAS C. ESQUEDA, Director  
Department of Public Utilities

## SUBJECT

Approve a Memorandum of Understanding Regarding Coordination, Cooperation, and Cost Sharing On Preconstruction Activities Related to the Temperance Flat Reservoir Project for a Total of \$500,000 to be Expended During Fiscal Years 2018, 2019, and 2020.

## RECOMMENDATION

The Administration recommends the City Council approve a Memorandum of Understanding (MOU) Regarding Coordination, Cooperation, and Cost Sharing On Preconstruction Activities Related to the Temperance Flat Reservoir (TFR) Project, to be entered into with other San Joaquin Valley public water agencies to conduct technical and financial feasibility studies for the TFR Project.

## EXECUTIVE SUMMARY

Friant Dam is owned and operated by the Bureau of Reclamation (Reclamation), and was constructed between 1939 and 1942 to create Millerton Lake, which has a volume of 520 thousand acre-feet (TAF). The 520 TAF storage capacity of Millerton Lake is small relative to the average historical annual inflow to Millerton Lake of approximately 1.8 million acre-feet (MAF), which requires Millerton Lake to be filled and emptied (turned over) approximately five times per year during normal

precipitation and snow pack conditions. The construction of additional water supply storage capacity in the Upper San Joaquin River watershed would provide greater operational flexibility to increase water supply reliability for agricultural, and municipal and industrial (M&I) use. The form of the additional water supply storage capacity in the Upper San Joaquin River watershed would be in the form of a new dam and reservoir system designated TFR, which would be constructed at River Mile 274 of the San Joaquin River to provide 1.26 million acre-feet (MAF) of additional storage. While the construction of TFR will only result in additional water supply yield of between 100 and 200 thousand acre-feet (TAF), the primary benefit of TFR is the operational flexibility to store water during wet years that can then be delivered and used during dry years, which is critically important to the City of Fresno.

The total capital cost required to construct TFR is currently estimated to be \$2.7 billion in 2015 dollars. To fill a potential financial gap to construct TFR, the San Joaquin Valley Water Infrastructure Authority (SJVWIA) prepared and submitted a Proposition 1 Water Storage and Investment Program (WSIP) Application to the California Water Commission (CWC) to provide a maximum financial contribution of \$1.3 billion of the \$2.7 billion (2015 dollars) required to construct TFR. With the Proposition 1 WSIP Application successfully submitted, it is now time to conduct more detailed technical and financial studies that will provide greater resolution and definition - on a user by user basis - of monthly water demands, monthly water supply available from inflow to Millerton Lake, monthly water supply available from other sources (surface water and groundwater), and additional water available from transfers and exchanges with other water agencies.

To complete the additional, more refined, technical and financial studies, the Friant Water Authority (FWA) has prepared a MOU to provide a mechanism for interested water agencies to coordinate and cost share for the required work, which will result in the development of a Final Operating Plan for the TFR Project. Participation in the proposed MOU would be open to public water agencies that are: (1) Central Valley Project (CVP) contractors; (2) State Water Project (SWP) contractors; (3) agencies that contract with Reclamation or the State to convey CVP or SWP water supplies (e.g., FWA and the San Luis Delta Mendota Water Authority); and (4) the Exchange Contractors.

The cost for the required technical and financial studies to be funded by all participating water agencies is currently estimated to be on the order of \$2,000,000, which will be expended during fiscal years 2018, 2019, and 2020. City staff estimates that the City of Fresno's total investment during these three years for technical and financial studies will be approximately \$500,000. Participation in the MOU will require an initial contribution of \$100,000 in fiscal year 2018, and subsequent contributions at the same level will be required during fiscal years 2019 and 2020. The remaining \$200,000 will be used for additional technical and financial studies anticipated for the project.

## **BACKGROUND**

The Friant Division of the CVP provides water to over one million acres of irrigable land on the east side of the southern San Joaquin Valley. Principal features of the Friant Division of the CVP include Friant Dam and Millerton Lake, and the Madera and Friant-Kern Canals, which convey water north and south to thirty-one agricultural and urban water contractors.

The Friant Division of the CVP has contractual obligations for 2,201,475 acre-feet per year, with 800,000 acre-feet allocated to Class 1 contracts and 1,401,475 acre-feet allocated to Class 2 contracts. Further, the thirty-one agricultural and urban contractors have contractual rights and priority to access additional classes of water from the San Joaquin River including, but not limited to,

Unreleased Restoration Flows, Recovered Water Account Flows, and Section 215 Non-Storable Flood Flows. The City of Fresno is a Friant Division CVP Contractor, with a Class 1 contract for 60,000 acre-feet per year, and contractual access and priority rights to other classes of water in the San Joaquin River.

Friant Dam is owned and operated by Reclamation, and was constructed between 1939 and 1942 to create Millerton Lake. The 520 TAF storage capacity of Millerton Lake is small relative to the average historical annual inflow to Millerton Lake of approximately 1.8 MAF, which requires Millerton Lake to be filled and emptied (turned over) approximately five times per year during normal precipitation and snow pack conditions. The construction of additional water supply storage capacity in the Upper San Joaquin River watershed would provide greater operational flexibility to increase water supply reliability for agricultural and M&I use in the Friant Division of the CVP, as well as environmental purposes in the San Joaquin River under certain operational and hydrologic conditions. While the construction of TFR will only result in additional water supply yield of between 100 and 200 TAF, the primary benefit of TFR is the operational flexibility to store water during wet years that can then be delivered and used during dry years, which is critically important to the City of Fresno.

### **Temperance Flat Reservoir**

The form of the additional water supply storage capacity in the Upper San Joaquin River watershed would be in the form of a new dam and reservoir system designated as Temperance Flat Reservoir, which would be constructed at River Mile 274 of the San Joaquin River. The proposed TFR Project would include a new reservoir, formed by constructing a new dam within the footprint of the existing Millerton Lake, and increase storage capacity upstream from Friant Dam by approximately 1.26 MAF. The total capital cost required to construct TFR is currently estimated to be \$2.7 billion in 2015 dollars. The total capital cost is beyond the financial means of one local public agency, and may be beyond the financial means of a consortium of local public agencies without financial support from state and federal agencies.

To fill a potential financial gap to construct TFR, the SJVWIA prepared and submitted a Proposition 1 WSIP Application to the CWC to provide a maximum financial contribution of \$1.3 billion of the \$2.7 billion (2015 dollars) required to construct TFR. The Proposition 1 WSIP Application was submitted August 2017, and CWC is expected to issue a determination of maximum conditional funding eligibility for TFR in June 2018.

### **Memorandum of Understanding - Purpose and Intent**

A Preliminary Operating Plan was submitted in the Proposition 1 WSIP Application for the TFR Project. The Preliminary Operating Plan included in the Proposition 1 WSIP Application is based on many generalized assumptions that demonstrate that the TFR Project is feasible under certain technical, environmental, economic, and financial conditions. With the Proposition 1 WSIP Application successfully submitted, it is now time to conduct more detailed technical and financial studies that will provide greater resolution and definition - on a user by user basis - of monthly water demands, monthly water supply available from inflow to Millerton Lake, monthly water supply available from other sources (surface water and groundwater), and additional water available from transfers and exchanges with other water agencies. To complete the additional, more refined, technical and financial studies, the FWA has prepared a MOU to provide a mechanism for interested water agencies to coordinate and cost share for the required work, which will result in a Final Operating Plan for the TFR Project.

Participation in the MOU would be open to public water agencies that are: (1) CVP contractors; (2) SWP contractors; (3) agencies that contract with Reclamation or the State to convey CVP or SWP water supplies (e.g., FWA and the San Luis Delta Mendota Water Authority); and (4) The Exchange Contractors. The cost for the required technical and financial studies to be funded by all participating water agencies is currently estimated to be on the order of \$2,000,000, which will be expended during fiscal years 2018, 2019, and 2020. City staff estimates that the City of Fresno's total investment during these three years for technical and financial studies will be approximately \$500,000. Participation in the MOU will require an initial contribution of \$100,000 in fiscal year 2018, and subsequent contributions at the same level will be required during fiscal years 2019 and 2020. The remaining \$200,000 will be used for additional technical and financial studies anticipated for the project.

Any agency may withdraw from the MOU at any time (subject only to consultant costs incurred as of the date of withdrawal). Participation in the MOU activities is voluntary and does not commit a party to investing in the TFR Project nor does it guarantee any right to participate in the TFR Project.

The MOU has been approved as to form by the City Attorney's Office. The Administration recommends the City Council approve the MOU, and the City's financial participation in the technical and financial feasibility studies to be conducted for the TFR Project.

## **ENVIRONMENTAL FINDINGS**

Pursuant to CEQA Guidelines section 15378(b)(5), entering into an MOU and conducting technical and financial studies is not a project for the purpose of CEQA

## **LOCAL PREFERENCE**

Local preference was not considered the City is entering into an MOU with other entities, and will not be contracting for services or construction.

## **FISCAL IMPACT**

There is no financial obligation for the General Fund for this MOU. The payment of the City's proportionate share of the feasibility study costs will be paid by the Water Division Enterprise Fund.

Attachment:

Memorandum of Understanding with Other San Joaquin Valley Public Water Agencies to Conduct Technical and Financial Feasibility Studies for the Temperance Flat Reservoir (TFR) Project.