

1. Administrative Details

Proposal Name: Success Reservoir Enlargement Project

by Agency: Tule River Improvements Joint Power Agreement Agencies (TRIJPA)

Locations: CA

Date Submitted: 08/09/2017

Confirmation Number: 3ca01700-5ee6-4de1-b176-e3c0cc9a456c

Supporting Documents

File Name	Date Uploaded
LTRID letter of support.pdf	08/09/2017
Combined Support Letter.pdf	08/09/2017
Lake Success USGS.pdf	08/09/2017

2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

Sponsor	Letter of Support
State of California and Lower Tule River Irrigation District(Primary)	The member agencies of the TRIJPA and the State of California have met to discuss the Success Reservoir Enlargement Project, in joint meetings with the Corps of Engineers. The TRIJPA fully supported the project's continuation during the July 2017 JPA meeting. The State of California has supported the project and is recommending approval by the Central Valley Flood Protection Board.
TRIJPA Member Agencies	Member Agency Contributors of TRIJPA include Lower Tule River Irrigation District, Porterville Irrigation District, Pioneer Water Company, City of Porterville, County of Tulare Flood Control District, Tulare Lake Water Storage District, and County of Kings.

3. State if this proposal is for a feasibility study, a modification to an authorized USACE feasibility study or a modification to an authorized USACE project. If it is a proposal for a modification, provide the authorized water resources development feasibility study or project name.

[x] Modification to an Authorized USACE Project : Section 101(b)(4) of the WRDA of 1999, Public Law 106-53 - Success Dam, Tule River Basin, California

4. Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.

The Success Reservoir Enlargement Project more than doubles the flood protection for the City of Porterville, from a 1:40 year protection to a 1:100 year protection along with flood protection for County of Tulare communities and downstream agriculture lands. The project was originally approved as part of WRDA 1999. A completed Project Feasibility Study was completed by the Corps of Engineers in 1999 that specified the purpose(s) of the enlargement project. This modification is for the increase in the total project costs to account for the increase in land values for the purchases of mitigation for upstream and downstream effects and also incorporation of design changes from recent failure events at Oroville Dam in California. The original feasibility study identified over 700 acres of land to be purchased for mitigation of construction impacts and that land was valued at \$2,000 per acre. Now that the project was approved to move forward from the delay that the Dam Safety Project imposed due to unknown risks the project was approved to move forward with design/construction of the Enlargement Project on 25 July 2017 at the Dam Senior Oversight Group. Upon receiving approval to move forward the first action identified from Sacramento District Environmental/Real Estate was to update the cost per acre for mitigation requirements. The new mitigation impact per acre was increased to \$40,000 per acre, which drove the costs up by 26,000,000. The team also had to change the downstream apron length and thickness to incorporate the lessons learned from the failure at Oroville Dam, and had to include in a 2nd cut-off wall to address erosion that was never assumed in the original design. All of these aspects are being addressed in the current evaluation of the Level 3 Economic Update.

5. To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.

	Federal	Non-Federal	Total
Study	\$500,000	\$500,000	\$1,000,000
Construction	\$37,700,000	\$20,300,000	\$58,000,000

Explanation (if necessary)

The estimated cost of construction of the Enlargement Project continues to be evaluated and revised as the project moves towards construction. The current construction cost of \$58,000,000 is the amount estimated by the local non-federal sponsors.

6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

This study investigated the feasibility of providing (1) increased flood protection to the area downstream of Success Dam, which include the city of Porterville, other urban areas, and agricultural land and (2) increased upstream storage for irrigation water supply. Success Dam and Lake, constructed by the Corps of Engineers in 1961, are operated by the Corps of Engineers for flood control and storage of irrigation water. Recreational facilities at the lake were constructed by the Corps after the dam was completed. The dam is located on the Tule River about 6 miles east of Porterville. Currently, the dam controls flows from the reservoir on the Tule River up to a 1 in 50 chance of flooding in any given year to Porterville, a 1 in 14 "chance of flooding east in any given year of Porterville and one in 3.3 chance of flooding in any given year in the Tulare lakebed. The net annual benefits for downstream alternative are \$334,000 at 1999 price levels.

The study area is located in the southeastern portion of the San Joaquin Valley, about 75 miles southeast of Fresno and 60 miles north of Bakersfield. The project area extends from Success Lake in the foothills six miles east of Porterville, to the Tulare lakebed southwest of Corcoran. Most of the project area is located in Tulare County while the western portion of the project extends into Kings County. State Highway 190 provides access to Success Lake from the valley floor and connects the project area with State Highway 99, a major north-south freeway route on the San Joaquin Valley floor. The Tule river exits the foothill channel in an alluvial fan and onto the San Joaquin Valley floor eventually reaching the Tulare lakebed. Elevations range from a maximum of 10,000 feet in the upper watershed to 550 feet at the dam, 450 feet at Porterville and approximately 175 feet at the lowest point in the Tulare lakebed.

The population of Tulare County was 360,400 as of January 1998, a 47 percent increase from 1980. County population is projected to grow to 612,000 by 2020. The City of Porterville grew from a population of 29,563 in 1990 to 35,450 in 1997, a gain of about 20 percent. Recent population trends for Porterville and other cities in Tulare county reflect growth at a rate of about 2 percent per year from the period 1990 to 1995.

Based on historic floods increased frequency of storms during the past 36 years, there are high risks for serious flooding. This can be addressed by providing increased flood protection for Porterville, the agricultural land along the Tule River, and the Tulare lakebed Region.

The total existing damageable units in the flood plain are 10,115 structures. The total value of damageable structures and contents are \$1.6 billion. There are 10,115 structures in the 500-year, 1,472 structures in the 100-year, and 760 structures in the 80-year flood plain. There are also farming and office structures located within the Tulare lakebed flood plain.

7. Does local support exist? If 'Yes', describe the local support for the proposal.

Yes

Local Support Description

The TRIJPA has met to discuss the project since approved in 1999. Support by the local interests, including the City of Porterville, the County of Tulare, the County of Kings, and the member agencies of the Tulare River Association has actively continued through the safety analysis and now through the re-surfacing of the enlargement project. Attached are the support letters.

8. Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?

Yes