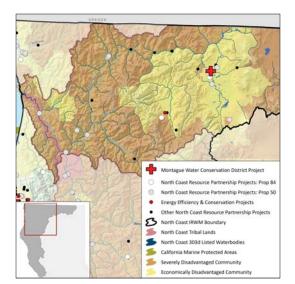
# **Montague Water Conservation District** — **Instream Flow Enhancement through Water Conservation**

## MONTAGUE WATER CONSERVATION DISTRICT















#### **COMPLETION DATE**

June 30, 2019

## STATEMENT OF THE PROBLEM

The Shasta River, a major tributary to the Klamath River, has experienced competitive use issues similar to many watersheds in the west. However, the Shasta River has been recognized as the most important tributary to restore the anadromous runs of salmon in the Klamath River. The Shasta River supports runs of Chinook salmon, Coho salmon, steelhead and lamprey.

#### PROJECT GOALS

- Increased instream flow to improve salmonid habitat
- · Improved water quality by incorporating cold groundwater to provide oversummering habitat for juvenile coho
- Increased community resiliency to challenges associated with climate change

## THE SOLUTION

This project will line 1.3 miles of Montague Water Conservation Districts Main Canal, where significant transmission or delivery loss occurs. In exchange for lining reaches of the Main Canal, the water district will permanently allocate the volume of water conserved, estimated at 680 acre-feet per year, for instream beneficial uses.

## PROJECT IMPLEMENTATION

Project design completed and permitting is nearly complete; construction to began in Fall 2017 and is scheduled to be complete in spring 2019.

## PROJECT BUDGET

IRWM funds: \$ 887,960 Leveraged funds: \$ 1,057,625 **TOTAL** \$ 1,945,585

## **BENEFITS**

## **Economic benefits**

- Approximately \$54,400 per year in benefits from increased instream flow for environmental purposes
- An estimated \$70,000 in avoided damages for each flooding event
- · About \$15,600 per year in avoided operations and maintenance of the unlined canal

### Water Quality

· Increased cold water during summer will improve instream water quality

## Habitat and Ecosystem function benefits

 Species protection for coho (Oncorhynchus kisutch), steelhead (Oncorhynchus mykiss), and Chinook (Oncorhynchus tshawytscha)

• Improved instream habitat in 6.4 miles of the Shasta River due to up to 6.0 cubic feet per second of cold water input during critical summer months

#### **Cultural benefits**

- Increased flood protection
- Conflict reduction in an area of the state where tensions have been high over competing uses of water
- Climate resiliency for both the community and aquatic habitat

#### Jobs and Local Economic Benefits

- Nearly \$2 million spent locally using local supplies and labor when possible
- About 10 jobs created/maintained during construction

#### **NEXT STEPS**

Project design completed in 2016, with construction beginning in fall 2017 and scheduled for completion by April 2019.

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