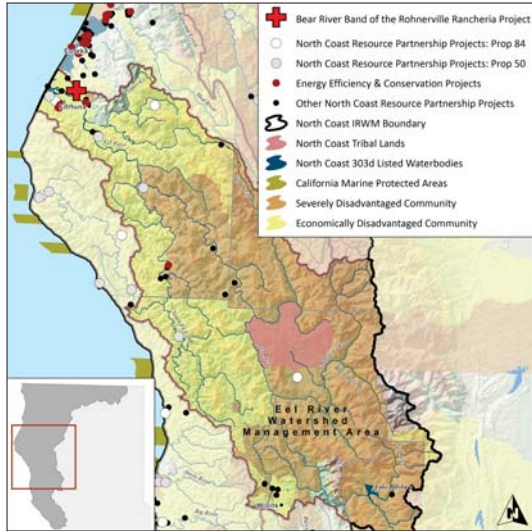


# Bear River Band of the Rohnerville Rancheria Reclaimed Water Project

## BEAR RIVER BAND OF THE ROHNERVILLE RANCHERIA



### COMPLETION DATE

February 28, 2017

### STATEMENT OF THE PROBLEM

The previous wastewater treatment plant (WWTP) discharged to a failing leach field resulting in contamination being present at the surface. The presence of contamination at the surface in the leach field created health concerns and resulted in an area of restricted access. The Tribe constructed a new WWTP to replace the failing facility. The original design of the new WWTP included the use of reclaimed wastewater for irrigation of four stormwater treatment wetlands, but due to financial restrictions this phase was cut from the project. Previously the Tribe was using potable water (pumped and treated groundwater) to irrigate a functional wetland in the dry season to keep the wetland plants alive. In the wet season, the wetland is used for the biological treatment and sediment reduction of stormwater runoff from parking lots, roads and other developed surfaces.

### PROJECT GOALS

- Water supply reliability
- Ecosystem restoration and enhancement
- Enhanced regional cooperation
- Improved economic vitality for a Disadvantaged Community

### THE SOLUTION

This project includes 2,500 feet of reclaimed water piping to an existing aboveground tank that will be repurposed to supply reclaimed water to the wetlands. To repurpose the tank an existing wastewater line will be abandoned and rerouted to the new WWTP. The rerouted wastewater line to the new WWTP will increase the capacity of the reclaimed water system.

### PROJECT IMPLEMENTATION AND ACCOMPLISHMENTS

Wastewater is currently being treated using an AeroMod Biological Treatment System, Wetech Disc Filter, and Wedeco UV Disinfection Equipment. The treated water meets the Title 22 Standards for Disinfected Tertiary Recycled Water and is of the highest quality, suitable for irrigation of wetlands.

The project will be monitored and quantified by several independent metrics.

- The volume of reclaimed water used for irrigation will be monitored on an annual basis.
- The annual groundwater production will be monitored to verify the

reduction of volume due to use of reclaimed water for irrigation.

- Power consumption will be monitored annually to verify and quantify the energy savings by use of the reclaimed water for irrigation.
- A wetland specialist will survey the wetlands for vegetation, soils and hydrology twice a year.

### PROJECT BUDGET

IRWM funds: \$ 558,562  
**TOTAL \$ 558,562**

### BENEFITS

#### Economic benefits

- Approximately \$60,000 per year in water supply purchases

#### Water Supply

- Improved water supply reliability during summer months, when water is limited

#### Habitat and Ecosystem function benefits

- 10 acres of wetland enhancement which will allow the wetlands to flourish and provide important ecosystem services including CO<sub>2</sub> sequestration, water filtration, and pollination services

#### Cultural benefits

- Increased community resiliency to water shortages related to climate change and weather patterns

#### Jobs and Local Economic Benefits

- Over \$500,000 spent locally, using local supplies and labor when possible
- About 3 jobs created/ maintained

### NEXT STEPS

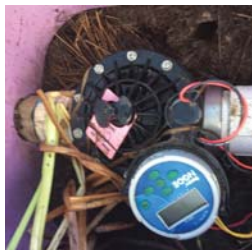
The Bear River Band of the Rohnerville Rancheria will continue to seek ways to diversify its water sources to increase community resiliency and will continue to work to improve wildlife habitat.

#### CONTACT

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 Freshwater Environmental Services  
 Wahlund Construction



**NORTH COAST RESOURCE PARTNERSHIP**