# Rio Dell Metropolitan Wells Redevelopment Project

CITY OF RIO DELL















#### **COMPLETION DATE**

May 31, 2016

# STATEMENT OF THE PROBLEM

Two drinking water wells at the site have been out of service for 10–15 years due to high manganese levels in the water produced by the wells. Modifications and upgrades to the wells would allow the City to use them as a secondary source of potable water in times of water scarcity or emergency.

# **PROJECT GOALS**

- 1. Ensure a water supply reliability for the City of Rio Dell
- 2. Decreased manganese concentration

# THE SOLUTION

The proposed project is to re-develop two existing drinking water wells and will include new pumps, piping, groundwater treatment, treatment unit housing, modification to existing electrical service, system controls, site security fencing, and paved access to the well site as well as connection the existing distribution system. Two existing wells will be cleaned, evaluated and flow tested to determine production rates. Once production rates are determined, the well site will be designed to pump, treat and convey clean drinking water. The project will also monitor ground water adjacent to the site via three groundwater monitoring wells installed by the project.

# PROJECT IMPLEMENTATION

When completed, this project will provide improved drinking water quality and drinking water reliability during emergencies and droughts for Rio Dell, improving the community's resiliency to climate change.

#### PROJECT BUDGET

IRWM funds: \$783,000 Total cost: \$783,000

#### **BENEFITS**

# **Economic benefits**

- \$76,800 in savings for households for reduced frequency of water shortages for three months every 10 years (estimated frequency of drought conditions in 2014)
- \$230,400 savings for the City of Rio Dell in avoided costs of importing water for three months every 10 years (estimated frequency of drought conditions in 2014)
- \$750,000 savings from avoided water supply projects involving

- the purchase and installation of a 1,000,000 gallon water storage tank
- \$4,100 yearly for ten years for avoided costs of heavy equipment rental and operators to divert water to the infiltration gallery
- \$25,000 one-time savings for avoided costs of permitting for heavy equipment use to divert water to the infiltration gallery

# **WATER SUPPLY**

Approximately 1,000 households with increased water supply reliability through drought and emergency situations

# **CULTURAL BENEFITS**

The completion of this project has lifted a water emergency declaration within the City that has been in place for over five years, allowing for resumption of socioeconomic activities that had been curtailed.

# JOBS AND LOCAL ECONOMIC BENEFITS

- The project cost \$783,000 which was spent using local labor and supplies when possible
- Approximately 2.5 jobs were created/maintained through project implementation

# **NEXT STEPS**

The City will continue to strive to provide high quality water to residents while ensuring adequate flows in the Eel River for environmental beneficial uses.

#### CONTACT

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