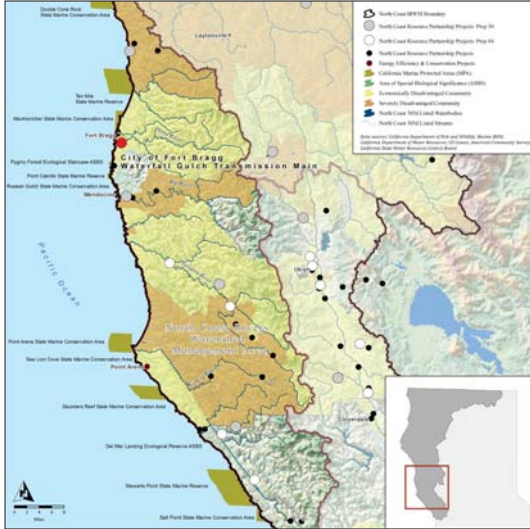


Waterfall Gulch Transmission Main

CITY OF FORT BRAGG



STATEMENT OF THE PROBLEM

Fort Bragg's water supply infrastructure is over half a century old and in need of repair. It is leaking treated water with increasing frequency and severity through cracks and leaks in the water main line at an initial rate of about 15,000 gallons per day.

PROJECT GOALS

1. Improve system reliability
2. Maintain critical water supply for the Disadvantaged Community of Fort Bragg
3. Improve system operation and maintenance

THE SOLUTION

This project replaces the Waterfall Gulch Raw Water Transmission Main. There is limited access to the existing main line and replacement will incorporate solutions for better access to the line in case of emergency and be guaranteed to have a service life of at least 75 years.

PROJECT IMPLEMENTATION

The project will replace the existing 8" water main between State Route 20 and Brush Creek Road with 5400 lineal feet of new 10" PVC C900 Class 235 pipe from Highway 20 along the existing pipeline easement to a point where the line crosses Thomas Lane just south of Scholars Bog then on a new alignment along the easterly side of Thomas Lane to Brush Creek Road, then east along Brush Creek Road to a point that intersects the existing raw water transmission line and tie into that point. The remainder of the main line will be replaced from Brush Creek Road to a proposed new reservoir approximately 1500' to the northeast of the intersect location during a later phase of the project. The project may be phased so that the portion between Thomas Lane and Brush Creek Road be considered Phase I, and the section of the project between State Highway 20 and Thomas Lane be considered Phase II.

COMPLETION DATE

Ongoing

PROJECT BUDGET

IRWM funds:	\$ 238,305
Leveraged funds:	\$ 550,000
TOTAL	\$ 788,305

BENEFITS

Economic

- Approximately \$1,260 per year provided by increased instream flows for environmental purposes
- Approximately \$4,200 per year in avoided water supply operations costs

- Approximately \$3,900 per year in reduced electricity costs associated with pumping
- Approximately \$3,000 per year in avoided costs associated with emergency repairs

Water Supply

- An increase in instream flows in the Noyo River of about 16.8 acre-feet per year

Water Quality

- Water quality will improve because the Waterfall Gulch source will replace some of the water currently provided by the Noyo source. The Waterfall Gulch water is of higher quality with less taste and odor issues
- Water quality will also improve because silt will no longer be able to enter the system through breaks and cracks in the pipeline

Watershed Rehabilitation

- Improved fish and wildlife habitat
 - » To the extent that the project increases instream flows, it is likely to enhance salmonid habitat and create conditions favorable to increased salmonid populations

Cultural

- Increased salmonid populations provide an intrinsic value outside of the cultural framework and economic terms often imposed by western society

Jobs and Local Economy

- About \$788,000 will be spent locally using local labor and supplies when possible, thus contributing to State goals for environmental justice and social equity
- Avoided costs associated with reduction in sediment from the intake

NEXT STEPS & RECOMMENDATIONS

The City of Fort Bragg will continue to seek funding to implement projects to improve aging infrastructure and water supply reliability for the disadvantaged community of Fort Bragg.

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NORTH COAST RESOURCE PARTNERSHIP