

Happy Camp Water Treatment System Upgrade

HAPPY CAMP COMMUNITY SERVICES DISTRICT (CSD)



STATEMENT OF THE PROBLEM

The California Department of Public Health (CDPH) has indicated that the existing water treatment system is missing a flocculation step and does not meet State requirements to qualify as direct filtration. Without an approved filtration system, the CDPH is concerned that there is the potential that under certain conditions, small particles, including organisms such as Giardia or Cryptosporidium that cause disease, could get through the filters and into the public drinking water system. Additionally, Happy Camp's water system would be out of compliance with federal and state drinking water regulations when the state adopts EPA's new Long-Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR), and vulnerable to failure in the event of a flood.

BENEFITS

Economic

- An estimated \$1,960 yearly for avoided costs of service disruption
- An estimated \$200 per year for avoided costs of non-compliance with drinking water regulations

Water Quality

- Improved drinking water quality

Social Benefits

- Protection and enhancement of drinking water quality for an economically disadvantaged community
- Protection of water treatment operators from potential electrical shock due to damaged and/or flooded equipment

Jobs and Local Economy

- Over \$ 500,000 was spent locally using local labor and supplies when possible, thus contributing to State goals for environmental justice and social equity
- Avoided costs associated with emergency repairs if a ten-year flood occurs

PROJECT GOALS

1. Protect and enhance drinking water quality
2. Protect public health
3. Maintain system operation in the event of a flood

THE SOLUTION

This project will upgrade the existing water filtration plant to protect and enhance water quality and public health for an economically disadvantaged community.

PROJECT IMPLEMENTATION

The project constructs a new roughing filter upstream of the two existing pressure filters and provides additional upgrades including:

- Upgrade of the existing wetwell pumps and electrical equipment to handle the additional hydraulic and electrical load
- Relocation of existing wetwell electrical equipment to place it a safe distance outside the 100-year floodplain
- Improvements to the existing backwash disposal pond to handle additional filter backwashing cycles
- Improvements of Supervisory Control and Data Acquisition (SCADA) for the existing water treatment plant and existing water storage tank for better control of water storage tank levels and wetwell pump operation.

COMPLETION DATE

Ongoing

PROJECT BUDGET

IRWM funds:	\$ 253,000
Leveraged funds:	\$ 251,000
TOTAL	\$ 504,000

NEXT STEPS & RECOMMENDATIONS

The Happy Camp CSD will continue to monitor drinking water quality and project performance to ensure that the disadvantaged community of Happy Camp will be provided with high quality drinking water at reasonable rates while also ensuring operator safety.

CONTACT

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NORTH COAST RESOURCE PARTNERSHIP