



Water Engineering:

Booster Stations, Tanks, Wells, and Intakes

- Variable Frequency Drives
- Harmonic Distortion Filters
- Backup Power
- Radio & Telemetry SCADA Systems

WEI has designed booster and pump stations, storage and hydropneumatic tanks, wells, and water supply intake and filtration facilities. Booster stations designs have included variable frequency drives with harmonic distortion filters, backup power with automatic transfer switches, automatic louvre opening and closing for intake and exhaust air, cranes, and SCADA systems. Systems designed were for domestic culinary, fire, and combined flows. Wells supplied water to mountain communities and resort subdivisions.

Selected Projects



Redlands Mesa Golf Course Community, Mesa County, CO

Designed water distribution system and a 4 pump booster station with auto transfer to backup power generation and variable frequency drives. Enclosed in a building, system had automatically opening louvres for the generator intake and exhaust air, plus overhead crane.

Water Booster Station, Payson, AZ

Designed mountain subdivision water system. Elevated locale was ideal for regional town facility. Coordinated between developer and town and designed a 500,000 gallon water storage tank and five (5) pump booster station facility. Utilized KYPIPE computer program.

City Water Supply Upgrade Masterplan, Central City, CO

Evaluated improvements to the water intake facility and supply and distribution lines for the entire town.

Norwood Water System Master Plan, Norwood, CO

Designed improvements to the water supply intake facility for the entire town and surrounding agricultural region.

Water System Fire Flow Booster Station, Minturn, CO

Designed booster station facility for domestic and fire flow.

Water Supply Improvements, Red Cliff, CO

Designed infiltration gallery, pump station, and water filtration facility for the entire water supply to the town.

North Delta Water Tank Feasibility Study, Delta, CO

Evaluated various tank sites with respect to land ownership, geotechnical, aesthetic, hydraulic, and pumping considerations, and steel versus concrete tanks.

Water System Modeling, Starlight Pines, AZ

Designed water system for 800-acre mountain resort having several pressure zones, wells, and storage tanks.

Elusive Acres Water System, Elusive Acres, AZ

Designed water system for mountain subdivision water system design including wells, storage tank, and booster station.

