



## Kelly Fearney, P.E., Senior Engineer

Kelly has over 12 years of experience in civil and environmental engineering. Much of her work has focused on water treatment evaluations, treatment system design, site planning, drainage studies, and remediation. Project locations have included industrial sites, active and abandoned mines, commercial development, and municipal applications. She has completed water projects in Washington, California, Arizona, New Mexico, and Colorado.

### Years Experience

- 12 years of experience

### Experience Highlights

- Previously worked for AMEC Environment & Infrastructure
- Recognized as Top 20 Under 40 by Engineering News Record

### Education

- B.S., Civil and Environmental Engineering, University of Vermont, 2003

### Licensing

- Professional Engineer:  
-Colorado 43232

### Awards

- Top 20 Under 40 by Engineering News Record
- 2012 Regions Most Talented Community-Minded Professional under 40 Years Old
- June Veinott Award by UVM Engineering Dept

### SELECT WATER ENGINEERING EXPERIENCE

- **Town of Milliken Selenium Treatment Study** – The Town of Milliken utilizes shallow groundwater with high total dissolved solids, treated using reverse osmosis, to supply a portion of the Town's drinking water. The RO process produces a wastewater that is surface water discharged and not currently in compliance with the State standards due to Selenium concentrations. The study included evaluation of the raw water quality, existing treatment system, available technologies for selenium removal, capital and net present value cost analysis, the ability to meet short term and long term discharge standards, and coordination of multiple bench scale treatment tests.
- **Village of Taos Ski Valley** - Project Engineer for design of a 250,000 gallon buried concrete potable water storage tank and associated piping, valves, controls and pumps. Tasks include preparation of design drawings, technical specifications, and bid documents. Project coordination involves multiple stakeholders including property owner, municipality, environment department, and funding agency.
- **Prospect Mountain Water Association Tank Preliminary Engineering Report** - Project Engineer for preparation of a master plan and capital improvements plan including evaluation of the existing distribution piping and storage. Analysis included compliance with industry standard, need for upgrades and replacements, and long term financial outlay.
- **Town of Estes Park Water Master Plan Update** - Project Engineer for the Town of Estes Park Water Department Water Master Plan Update. The Master Plan includes a raw water resources evaluation, future demand projections, a water distribution system evaluation, evaluation of the water treatment facilities (Glacier WTP 3.5 MGD conventional treatment facility and Mary's Lake WTP 4 MGD GE membrane facility); and recommendations, prioritization, and timing of capital projects along with their associated costs.
- **City of Durango Animas Raw Water Pipeline** - Project Engineer for design of a 30" pipeline to convey raw water from an existing pump station off the Animas River to the existing raw water conveyance system. Design components include automatically controlled butterfly valve, connection to existing piping, steel pipe design, and pipeline river crossing. Project includes technical drawing plan sets and bid specifications.
- **City of Durango Florida Raw Water Intake** - Project Engineer for design of replacements and upgrades to the raw water intake along the Florida River. Design components includes multiple headgates, small building, new automatic flow control and sampling, river protection and habitat enhancement, below grade pipe installation, and design of parshall flume flow measuring devices. Project includes technical design drawings and specifications.

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- **Southside Mutual Domestic Water Treatment Plant** – Project Engineer during the bid process for construction of the water treatment plant. Tasks included preparation of technical specifications and bid documents, coordination of pre-bid meeting, addressing bidder's questions, and reviewing bids.
- **Southside Mutual Domestic Water Association Tank Preliminary Engineering Report** – Project Engineer for coordination and preparation of a tank PER report including evaluation of existing storage capacity, distribution system mapping, hydraulic modeling, demand analysis, tank material comparison, and cost evaluation. The PER was prepared in accordance with the USDA Rural Development criteria.
- **Water Treatment Feasibility Study, Mine Site Okanogan County, WA** - Responsible for the evaluation of existing reverse osmosis treatment system and opportunities for optimization and feasibility of additional processes
- **Water Treatment Evaluation, Mine Site Juneau, AK** - Responsible for the evaluation of existing treatment equipment with regard to performance and permit compliance
- **Water Treatment Evaluation, Panoche Energy Center Firebaugh, CA** - Responsible for evaluation and preliminary design of water treatment system
- **Water Treatment Design, Mine Site Rico, CO** - Responsible for design components in a 30-gpm passive water treatment project
- **Groundwater Collection System, Industrial Site Wood River, IL** - Design and plan set preparation for two production wells into cone of depression wells for control and treatment of impacted groundwater
- **Groundwater Collection, Treatment, and Injection, Phoenix Goodyear, AZ** - Design of extraction well heads, conveyance pipelines, and injection well heads
- **Water Chlorination Design, Falls Creek Ranch, Durango, CO** - Feasibility study, design, and permitting of a potable water chlorination system
- **Water Distribution and Treatment, Neils Excavation, Durango, CO** - Design and permitting of a water distribution system and chlorination system to serve a USFS campground

## Site Planning, Utility Planning, & Road Design

- **Village of Taos Ski Valley Kachina Storage Tank**
- **Access and Drainage Design, La Plata County, Durango, CO**
- **Site Utility Master Plan and Design, Mercury Payment Systems, Durango, CO**