



Wright Water Engineers, Inc.

JONATHAN M. KELLY, P.E.
SENIOR WATER RESOURCES ENGINEER
VICE PRESIDENT

CURRENT	Water resources engineer with experience in water supply and water rights engineering, hydrologic analysis of groundwater and surface water systems, channel hydraulics and floodplain delineations, water quality evaluations, application of best management practices (BMPs), and sizing of stormwater facilities.
EDUCATION	M.S., Civil Engineering, 1993 University of California, Los Angeles B.S., Civil Engineering, 1992 University of California, Los Angeles
REGISTRATION	Professional Engineer — Colorado #33901

REPRESENTATIVE PROJECTS

Water Rights

Flattops Water Company. Engineer for water court filing involving establishing the firm yield of transbasin water rights from the Yampa River to the Colorado River basin. Successfully negotiated technical issues with nineteen objectors to obtain decree. Managed feasibility evaluation of additional reservoir sites based on criteria, including inundation wetlands and storage versus dam height. Assessed ditch loss characteristics and return flow patterns for Stillwater Ditch, which runs along the drainage divide. Assisted client with removing water right on Division Engineers' abandonment listing.

Exxon Mobil Corporation. Performed engineering services relating to extensive water rights portfolio of an energy producer in the Piceance Basin. Engineer of record on nine different water court filings, including multiple augmentation plans, quantification of historical consumptive use (HCU) credits from irrigated lands, and use of Glover to calculate lagged stream depletions due to well pumping. Pending cases include transbasin diversion from Colorado River to the White River basin.

Adam's Rib Ranch. Lead engineer on augmentation plan for a golf course residential development south of Eagle, CO. Working with attorneys to optimize use of water rights portfolio, while maintaining diligence on conditional water rights. Augmentation plan included quantification of historical consumptive use (HCU) credits from irrigated lands to offset evaporative losses from golf course ponds.

Shorefox/GDL. Engineered the water rights for a 1,200 equivalent residential unit development in Granby, CO. Working with objectors on six interrelated water court cases involving golf course/open space irrigation, municipal water supply, and onsite storage ponds. Also assisted client with negotiations with Town of Granby regarding annexation of the property.

Mountain Coal Company—West Elk Mine. Works closely with mine personnel and water counsel to implement augmentation plan for mine diversions. Performed field measurements to quantify transit losses for reservoir releases to replace out-of-priority depletions. Study reduced the charged channel seepage losses from 50 percent down to 10 percent. Implemented accounting for administration of augmentation plan for stream losses due to mine subsidence resulting from longwall coal mining. Assisted client with removing water right on Division Engineers' abandonment listing.

Coal Basin. Developed augmentation plan for large private property in Coal Creek watershed near Redstone, CO. Decried augmentation plan adjudicated storage rights and quantified releases to replace out-of-priority evaporative depletions. Successfully protested abandonment of water right through negotiation with Division Engineer.

Hell's Gate Ranch. Developed augmentation plan for large lot subdivision in Sweetwater Creek watershed. Engineering evaluation included incorporating historical uses and water rights with proposed development amenities.

Tybar Ranch. Provided engineering analyses relating to an augmentation plan for a cattle ranch outside Carbondale, CO.

Stella Polare. Completed engineering analyses to quantify water demands and depletions associated with a luxury property above Aspen. Augmentation supplies included contract water and onsite storage to satisfy local calls.

Small Water Court Cases. Provided water rights engineering services to numerous small projects for water court applications.

Stormwater and Environmental Permitting

ExxonMobil Administrative Complex. Project manager for design engineering services for the water system to serve the ExxonMobil Section 26 Administrative Complex (Complex) in the Piceance basin. The water treatment facility includes filtration in accordance with the Long Term 2 Enhanced Surface Water Treatment Rule and chlorination for disinfection. The process treatment design includes filtration, chlorination, and storage sufficient to achieve the minimum chlorine contact time and a pressure system for distribution system delivery. WWE's work addressed CDPHE submittals of the water treatment system component.

Glenwood Springs Airport SWMP. Project manager for Stormwater Management Plan (SWMP) Update for the Glenwood Springs Municipal Airport to address all requirements under the State Stormwater Industrial Permit, COR90000. The end result was a user-friendly document to address potential pollutant sources, stormwater controls and other requirements.

ExxonMobil Well Pads. Project Manager for the development of Storm Water Management Plans and permitting of wetlands for numerous natural gas well pad sites in the Piceance Basin in northwest Colorado.

Pine Creek Cookhouse. Project Manager for permitting of a water system that is classified as a transient, non-community water system according to criteria established by the Colorado Department of Public Health and Environment (CDPHE) and subject to specific water treatment requirements.

Drainage Criteria Manual. Primary author for two chapters of 2001 update of the Mile High Flood District's *Drainage Criteria Manual*.

Mountain Coal Company—West Elk Mine. Evaluated “probable hydrologic consequences” associated with subsidence due to longwall mining. Prepared text for permit with Colorado Division of Reclamation, Mining and Safety, including exhibits predicting mining subsidence and its effect on stream channels overlying the longwall panels.

West Elk Mine, Somerset. Prepared permit text for submittal to Colorado Division of Minerals and Geology regarding all aspects of surface water and groundwater quality/quantity impacts associated with mining-induced ground subsidence.

Elk Lake Dam Rehabilitation. Project Manager for design of a toe drain and embankment, spillway and crest repairs for Division 6 dam near Craig, Colorado. Prepared an Emergency Action Plan (EAP) in accordance with the *Rules and Regulations for Dam Safety and Dam Construction*.

Group of North Fork Coal Mines. Conducted a transit loss study a stream system in western Colorado to assess the channel seepage losses. Reservoir water is released to the stream system to augment out-of-priority depletions over twenty miles downstream. Downstream water users must account for transit losses before taking credit at their points of diversion.

West Elk Mine, Somerset. Applied a computer model to predict the subsidence resulting from longwall mining and assessed the changes in surface and groundwater hydrology. Evaluated the sediment transport characteristics and potential for increased channel erosion due to change in channel slope.

Adams Rib Recreation Area. Developed a comprehensive river basin simulation model for a proposed resort in Eagle County. Performed numerous simulation runs for alternative development scenarios to assess water rights implications and water quality issues.

West Elk Mine, Somerset. Performed a hydrologic analysis of a rain-on-snow precipitation event for a coal mine in western Colorado. The analysis showed that the runoff resulting from the storm exceeded the design capacity of a sediment pond and, thus, a NPDES permit violation was not warranted.

Glenwood Springs South Canyon Landfill SWMP. Project Manager for development of Stormwater Management Plan (SWMP) to address requirements under new Stormwater Industrial Permit. WWE worked closely with the City Engineer and Landfill Manager to prepare an effective document that meets the State's criteria.

Floodplain Permitting

Vance Street Walmart. Obtained Conditional Letter of Map Revision (CLOMR) for redevelopment of commercial property in Lakewood. Project involved complete re-routing of stream channel and associated floodplain while keeping impacts within property boundaries. Following project completion, obtained Letter of Map Revision (LOMR) from FEMA.

Exxon Mobil Corporation. Developed detailed study of several streams within the Piceance Creek watershed prior to construction of gas collection and processing facilities. Prepared report documenting post-project floodplain for submittal to Rio Blanco County.

Shorefox/GDL. Developed hydrology and hydraulic model to prepare a detailed delineation of the 100-year floodplain on the Colorado River for existing conditions.

PUBLICATIONS

Wright, K.R., T.A. Earles, and J.M. Kelly, 2003, Public Safety at Low Head Dams. Presented at the ASDSO Dam Safety 2003, Minneapolis, Minnesota, September 7-10, 2003.

Wright, K.R., J.M. Kelly, and A. Valencia Zegarra. 1997. Machu Picchu: Ancient Hydraulic Engineering. *Journal of Hydraulic Engineering*. 838-843 (October 1997).

Kelly, J.M., J.K. Clary, J.E. Jones, and E.W. Brown, 1996. Colorado Regulations for Preserving Riparian Corridors. Presented at the 1996 CASFM Conference on Thinking Outside the Box...Expand Your Horizons, Vail, Colorado, September 18-20, 1996.

Jones, J.E., E.W. Brown, J.K. Clary, and J.M. Kelly, 1996. Riparian Buffer Widths at Rocky Mountain Resorts. Presented at the 1996 Engineering Foundation Conference: Effects of Watershed Development and Management on Aquatic Ecosystems, Snowbird, Utah, August 4-9, 1996.

Wright, K.R., J.M. Kelly, R.J. Houghtalen, and M.R. Bonner, 1995. Emergency Rescues at Low-Head Dams. Presented at the ASDSO Annual Conference and Exhibit Show, Atlanta, Georgia, September 15-20, 1995

Wright, K.R., J.M. Kelly, and W.S. Allender, 1995. Low-Head Dam Hydraulic Turbulence Hazards. Presented at the ASDSO Western Regional Conference and Technical Seminar, Red Lodge, Montana, May 22-25, 1995.

Jones, J.E., J. Kelly, C. Wick, and T. Abernathy, 1994. Four-Season Resort Makes Strong Commitment To Riparian Corridor Preservation And Enhancement. Presented at the CASFM Conference on Multi-Objective River Corridor Management in the Arid West, Telluride, Colorado, September 15-16, 1994.