



## JONATHAN E. JONES, P.E., D.WRE

### CHIEF EXECUTIVE OFFICER

#### CURRENT

Employed by Wright Water Engineers, Inc. (WWE) from June 1981 to the present. Consultant to public and private sector clients on many aspects of surface water and groundwater quantity and quality engineering with emphasis on: stormwater quantity and quality; floodplain management; surface water hydrology and statistical hydrology; water resources planning, policy and design; physical and legal water supply, including water rights evaluations and watershed models; dam and reservoir design; groundwater quality and hydrology; interaction between surface water and groundwater; lake and river impact assessment studies; multiple aspects of Federal *Clean Water Act* (e.g. Sections 303, 308, 319, 401, 402, 404, and 405; municipal and industrial wastewater treatment; erosion/sediment control, channel stability and sediment transport; risk assessment; water classifications and standards; engineering aspects of wetland permitting and assignments involving RCRA and CERCLA.

#### EDUCATION

M.E., Civil Engineering, 1981  
University of Virginia

B.S., Civil Engineering, 1980  
University of Virginia

#### REGISTRATION

Registered Professional Engineer in:

- Colorado (#22812)
- Wyoming (#5072)
- Missouri (#EN028452)
- South Dakota (#6551)
- Arkansas (#12766)
- Nebraska (#E-9290)
- Kansas (#15784)
- Ohio (#E-66327)
- Texas (#88335).

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#### REPRESENTATIVE PROJECTS

##### ***Stormwater Management and Flood Control***

**Denver Urban Drainage and Flood Control District and Cities and Counties in the Denver Metropolitan Area.** Consultant on wide-ranging stormwater quantity/quality issues. Managing Principal Engineer and/or Project Manager of such documents as Volumes 1 and 2 of the *Urban Storm Drainage Criteria Manual* (criteria for 42 cities and counties in the Denver metropolitan area); Lower Box Elder Creek Major Drainageway Master Plan, Big Dry Creek Tributaries Master Plan and Beebe Seep Canal/Barr Lake Master Plan, and associated flood hazard area delineation (FHAD) reports. Prepared the water rights and water quality chapters of the *South Platte River Master Plan* (through Metropolitan Denver). Advisor to Urban Drainage and Flood Control District on draft Phase 1 stormwater NPDES regulations.

## Jonathan E. Jones, P.E., D.WRE

**State of Colorado.** Retained to evaluate the nature and causes of surface water damage at the campus of Colorado State University (CSU) in Fort Collins and state office buildings in Sterling during July 1997 extreme rainfall events. In addition, served as expert for State of Colorado regarding professional practice charges against licensed professional engineer (case ultimately settled) regarding groundwater contamination and well water supply.

**City of Springfield and Greene County, Missouri and Watershed Committee of the Ozarks.** Development of stormwater management policies, ordinances, design criteria manual, floodplain regulation and modeling assignments. Design and construction oversight of stormwater wetland. Watershed protection plan preparation.

**USEPA International Stormwater BMP Performance Database.** Currently serving as co-principal investigator for ASCE, EWRI, WERF, APWA, and FHWA on an approximately \$1.0 million grant from the USEPA for the establishment of a national stormwater BMP performance database ([www.bmpdatabase.org](http://www.bmpdatabase.org)). This database has been identified by USEPA as one of its top needs in the wet weather research and regulatory arena. Version 1.0 of the database was first disseminated in August 1999.

**City of Lincoln, Nebraska.** In conjunction with Olsson Associates Consulting Engineers, preparation of Major Drainageway Master Plans, floodplain delineations, and Storm Drainage Criteria Manual for the City of Lincoln, Nebraska and the Lower Platte South Natural Resource District. Also, advised City of Lincoln staff on stormwater NPDES permitting issues and maintenance/upgrading prioritization as sub-consultant to JEO.

**Kansas Department of Transportation.** Evaluation of flooding near confluence of Walnut River and Arkansas River. Separate evaluation of feasibility of relocating irrigation ditch near Garden City, Kansas (subconsultant to Burns & McDonnell).

**City of Rogers, Arkansas and Crafton Tull Associates.** Consultant on storm drainage criteria, major drainageway master plans, ordinance enactment, erosion and sediment control, stormwater quality, stormwater NPDES regulations, and floodplain regulation and delineation.

**Simeon Residential Properties.** Working closely with Simeon (site developer) and downgradient, affected parties, designed comprehensive and advanced stormwater quality management plans for two separate developments, Grant Ranch and Chatfield Green (TrailMark), in Littleton, Colorado. Both of these projects involved the application of numeric discharge standards for stormwater BMPs and provide a high level of protection for downgradient receiving waters (both surface water and groundwater). Worked closely with Carroll and Lange on final design of channels, wetlands, ponds and other features. In addition, oversaw confidential assignments for Simeon Properties related to "due diligence" for various properties related to physical and legal availability of groundwater and surface water, natural hazards, drainage, etc. Consultation regarding potential availability of Denver Basin groundwater. Developed water supply from Coal Creek for new golf course near Erie, Colorado.

**Padre Island, Texas.** Evaluation of flood hazards (due to hurricanes) for potential development.

**Houston, Texas Floodplain Mapping Evaluation.** Reviewed proposed FIRM maps prepared by Harris County Flood Control District for major property owners in Houston metropolitan area.

**City of Rockford, Illinois.** Stormwater NPDES permitting.

**Denver International Airport (DIA).** Assisted with preparation of initial Storm Drainage Criteria for DIA, working as subcontractor to Bechtel, and with assessment of Denver Basin groundwater reserves on property. Assisted with major drainageway master planning of Lower Box Elder Creek on east side of DIA.

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**USEPA Office of Water in Washington, D.C.** Advisor on a variety of issues such as: (1) indicators for monitoring the effectiveness of “wet weather” control measures (1993 for EPA directly and 1995 for the Rensselaerville Institute), (2) national case studies for advanced industrial stormwater management (1993 and 1994), (3) stormwater BMP effectiveness, from 1995 to present, and (4) flow measurement in irrigation systems. Also reviewed 1996 draft version of document *Wet Weather Research Plan and Stormwater Pollution Prevention for Industrial Activities and Stormwater Pollution Prevention for Construction Site Activities* (focus on erosion and sediment control/channel stability), published by the Office of Wastewater Enforcement and Compliance, USEPA.

**University of Illinois.** Assisted Dr. Edwin Herricks with design of parking lot BMPs at campus in Urbana–Champaign.

**Audubon, Arkansas.** Evaluated adequacy of proposed stormwater quality management facilities for potential commercial development in Fayetteville.

**City and County of Denver.** Project Manager for 2004 *Denver Water Quality Management Plan* and 2006 *Storm Drainage Criteria Manual*.

**Los Alamos National Laboratory, New Mexico.** Prepared site-wide drainage criteria memorandum that addressed both stormwater quantity and quality. Prepared construction-related stormwater pollution prevention plan for RCRA site subject to remediation (site contains transuranic and hazardous wastes). Risk assessment from standpoint of stormwater and sediment discharges. Final design of erosion/sediment control plan and plan to stabilize highly erodible soils at contaminated site. Advisor on interface between RCRA and stormwater management under the *Clean Water Act*. Site-wide drainage assessment and floodplain delineation.

**San Diego County, California.** Consultant regarding revisions to the County Drainage Criteria Manual and implementation of stormwater quality mitigation measures.

**City of Beaumont, Texas.** Consultant on master drainage planning, drainage criteria development and floodplain regulation and delineation.

**City of Tulsa, Oklahoma.** Consultant on stormwater NPDES permitting, major drainageway master plans, and floodplain regulation and delineation.

**Knaust Brothers, (Saugerties, New York).** Engineering review and testimony on adequacy of proposed stormwater quality management facilities for industrial office park in karst setting, including probable migration of stormwater into underground caves.

**Great Western Sugar Company.** Evaluated flood hazard potential of Great Western Sugar Company’s Johnstown, Colorado facility with respect to floods ranging from the 10-year to 500-year return frequency, along with groundwater contamination studies, land treatment of high-strength industrial wastewater, and field sampling of groundwater quality.

**University of Colorado and City of Boulder, Colorado.** Co-authored study of environmental impacts of proposed 95-acre University of Colorado Research Park in Boulder, Colorado. Prepared site-wide conceptual drainage plan. Also, in a separate assignment, analyzed flood hydraulics, regulatory constraints and specific flood proofing measures for research buildings located in the Boulder Creek Floodway in Boulder, Colorado. Development of floodwater surface profiles.

**Colorado Ski Country USA.** Expert witness for Colorado Ski Country, USA (consortium of all Colorado ski resorts), in hearings involving the Colorado Water Quality Control Commission and staff with the Colorado Water Quality Control Division on water quality standards in wetlands and stormwater NPDES permitting. Also prepared written testimony for Colorado ski resorts that was submitted to the USEPA in Washington, D.C., regarding Phase II of stormwater NPDES permitting. Regular consultant to the Colorado ski industry on wide-ranging water resources issues.

## Jonathan E. Jones, P.E., D.WRE

**Keystone Resort and Keystone-Intrawest.** Consultant on advanced stormwater quantity and quality management to comply with stringent Summit County phosphorus regulations for Lake Dillon; wastewater treatment and beneficial reuse; Lake Dillon model review (lake impact model); NPDES permitting; erosion and sediment control; water supply/water rights; 404 permits; integrated pest management and “pesticide-free” golf course design; snow-storage facility design; water quality monitoring; drainage and flood control; debris flow; groundwater supply investigation, and interaction of surface water and groundwater.

**Bekaert Steel.** Stormwater quality and NPDES permitting assignments for facility in Bentonville, Arkansas.

**Arkansas City, Kansas.** Expert testimony for the City of Arkansas City, Kansas, and the Kansas Department of Transportation (KDOT) regarding flooding on Walnut River, related to construction of highway, which served as a levee to protect the east side of Arkansas City.

**City of Lamar, Colorado.** Expert testimony regarding nature and causes of flooding along Willow Creek on the east side of the City of Lamar.

**City of Golden, Colorado.** Comprehensive review of nature and causes of flooding in Arapahoe Gulch and a tributary to Kenneys Run during large storms that occurred in June 2004, followed by master plan and preliminary design of improvements for Arapahoe Gulch. Worked on projects in close conjunction with Colorado Water Conservation Board, Urban Drainage and Flood Control District, and City staff and neighborhood residents. Also, assistance on floodplain regulation.

**City of Woodland Park, Colorado.** Evaluation of flooding damages in mobile home park, including assessment of whether recent channel modifications had aggravated flooding.

**Flood Hazard Evaluations.** Floodplain delineation/interpretation using HEC-2 and HEC-RAS on such projects as Denver Mile High Stadium, Arkansas River in Pueblo, Colorado, Blue River in Silverthorne, Colorado, Clear Creek in Jefferson County, Colorado, and major drainageways in Texas, Missouri, Nebraska and other states, including CLOMR's and LOMR's.

**Stormwater-related NPDES Permits.** Consultant for such public and private entities as the Adolph Coors Company; Rocky Flats Environmental Technology Site; Futura Aluminum Company; Bar S Foods Company; Los Alamos National Laboratory; San Diego County; Watershed Committee of the Ozarks; John Morrell Company; Union Carbide; Arco Coal Company; Vail Associates; Keystone Resorts; the City of Rogers, Arkansas; City of Lincoln, Nebraska; Bekaert Steel (Bentonville, Arkansas); City of Rockford, Illinois; City of Springfield, Missouri; Lennar Homes; Village Homes; Continental Homes; J.F. Laing Homes; and Intrawest Resort Development.

**Denver Regional Council of Governments.** Coauthor of three-volume set of erosion control manuals in 1982-83, which focused on how to prepare erosion control plans, costs of erosion control measures and design recommendations for control measures best suited to Denver Metro area.

### **Water Quality**

**Philips Farm.** Lead consultant for development of comprehensive water quality protection plan for proposed 500-acre residential/commercial development known as Philips Farm in Columbia, Missouri. Development located adjacent to two streams (Gans Creek and Clear Creek) that were considered to be highly sensitive and subject to very stringent discharge requirements.

**BP Products North America, Inc., Colorado.** Assistance on numerous projects involving water quality and wetlands protection including, for example, evaluation of beneficial surface reuse alternatives for waters produced in association with coal bed methane.

## Jonathan E. Jones, P.E., D.WRE

**City of Wildwood, Missouri.** Evaluation of nature and causes of water quality degradation in two large residential lakes (Chesterfield Lakes) in the northeast part of Wildwood, including assessment of adequacy of erosion and sediment control practices at approximately 100-acre construction site.

**City and County of Denver Water Quality Management Manual.** Oversaw preparation of comprehensive water quality protection plan for City and County of Denver, working with representatives of most major departments within Denver. This is the City's official position as to how it will approach wet weather control in the future.

**Southern Hills Lakes, Springfield, Missouri.** Comprehensive assessment of nature and causes of water quality degradation in three lakes on the east side of Springfield, Missouri known as Southern Hills Lakes. Prepared action plan for addressing problem. Worked closely with neighborhood residents and presented findings to City Council.

**National Renewable Energy Laboratory (NREL).** Stormwater BMP performance monitoring at Wal-Mart store in Aurora, Colorado.

**Lennar Homes.** Assistance with stormwater permitting throughout the United States, with emphasis on Nevada, Arizona, California and South Carolina.

**Potential Ski Resort in Idaho.** Retained by Vail Associates to evaluate engineering feasibility of potential ski resort near Cascade Reservoir.

**Kansas Livestock Association.** Provided assistance with stormwater runoff issues in regulatory hearing with USEPA regional office.

**Associated Ditches of Kansas.** Assistance with TMDLs on Upper Arkansas River.

**Union Carbide Minerals (UMETCO).** Open pit mine reclamation near Hot Springs, Arkansas.

**Town of Silverthorne, Colorado.** Retained by Town to evaluate potential adverse hydrologic impacts to wetlands as a consequence of existing and proposed residential construction. Investigation included construction of approximately fifty soil test pits and piezometers; interaction of surface water and groundwater; site hydrologic mass balance; groundwater hydraulics in response to development features such as foundation drains, road cuts, etc., and evaluation of measures to mitigate potential hydrologic modifications.

**Agricultural Water Supply And Water Quality Issues.** Consultant on various assignments including non-point source pollution TMDLs, endangered species and related subjects for ranchers, irrigation districts and companies, and water right purchasers. Representative clients include The Garden City Company (Kansas), Kansas Livestock Association, The Associated Ditches of Kansas, Rocky Mountain Shambhala Center (Red Feather Lakes, Colorado), Coors Brewing Company (Coors owns agricultural properties), Greenland Ranch (Douglas County, Colorado), ranches purchased by Colorado Open Lands for historic preservation, and irrigated lands in North Dakota related to the Garrison Diversion project of the U.S. Bureau of Reclamation.

**Golf Course Water Quality Impact Mitigation Plans.** Water quality planning for such courses/entities as: Applewood (Jefferson County); Keystone River Course; Keystone Ranch Course; Adam's Rib (Eagle County); Maroon Creek Club (Pitkin County); Greene County, Missouri; "The Greens," Springfield, Missouri; and 1996 *Golf Course BMP Manual* for Colorado Department of Health and Denver Regional Council of Governments.

**Total Petroleum.** Consultant on two separate matters involving the CRC refinery on Sand Creek in Commerce City, Colorado. Both cases centered on defining groundwater hydrology and subsurface contaminant movement. Also defined the significance of alleged NPDES violations and receiving water impacts in Sand Creek.

## Jonathan E. Jones, P.E., D.WRE

**Climax Mining Company, Colorado.** Testimony regarding statewide water quality standard for selenium.

**Salt Lake City, Utah Golf Course.** Saline soils and water supply investigation for golf course in Salt Lake City owned by Zion Properties.

**Coalition of Keystone, Breckenridge, Copper Mountain, Vail, Winter Park and Silver Creek ski resorts and L.G. Everist, Inc.** Consultant regarding negotiations with Northwest Colorado Council of Governments (NWCCOG) on water quality standards for the NWCCOG jurisdictional area. These standards addressed such topics as stormwater quantity and quality management, erosion and sediment control, wetlands protection, protection of hydrologic balance, hazardous materials management, sensitive watershed development, etc.

**ExxonMobil.** Environmental permitting and stormwater management consulting in Wyoming and Colorado.

**Copper Mountain Resort.** Preparation of Water Quality Protection Plan (WQPP) for entire base area of resort. Evaluation of adequacy of water and wastewater systems in response to projected major growth increases. Design of dewatering facilities for large underground parking areas, including comprehensive groundwater monitoring and modeling effort, and defining relationship between surface flows and groundwater levels. Design of underground parking drainage and pretreatment facilities. Assistance with stormwater quantity and quality design and lake water quality investigations. Acquisition of various NPDES permits. Stream impact assessment, including biological monitoring.

**BP America.** Environmental permitting and stormwater management consulting in Wyoming and Colorado and water supply planning in Colorado.

**State of Utah Department of Environmental Quality.** Assisted with preparation of regulation regarding statewide wetland water quality standards (subconsultant to Sear Brown Group).

**ARCO Coal Company.** Project Manager of various assignments in Wyoming (Black Thunder Mine and Coal Creek Mine) and Colorado such as: review of adequacy of water-related sections of EIS for proposed 3,200-acre expansion of Black Thunder Mine; preparation of stormwater NPDES permits for Wyoming mines; work with Colorado Division of Minerals and Geology to design restoration plan for large coal refuse pile near Trinidad, Colorado; evaluation of groundwater quality issues; 404 permitting requirements; and general water resources consulting.

**Arapahoe County Water and Wastewater Authority (ACWWA).** Evaluated potential adverse impacts to raw water supply for ACWWA customers as a consequence of proposed discharge of municipal effluent a short distance upstream from ACWWA's municipal water supply wells in the Cherry Creek alluvium. Analysis included assessment of surface water and groundwater interaction, groundwater flow, and contaminant movement through alluvium, wastewater reuse; technical and policy issues; and other topics.

**Town of Snowmass, Colorado.** Prepared Brush Creek Watershed Plan. Comprehensive water quality monitoring program for Town; stream channel stabilization and restoration, and interaction on such topics as riparian corridor protection; wetlands protection; and related topics.

**City of Winnipeg, Canada.** Consultant regarding measures to be implemented to enhance the water quality of 200 lakes within the City of Winnipeg. Project began with assessment of the causes of observed problems and receiving water impact studies.

## Jonathan E. Jones, P.E., D.WRE

**Lowry Landfill in Denver, Colorado.** Project Manager for a comprehensive surface water monitoring program, and surface water hydrology evaluations, including interaction of surface flows with alluvial groundwater. Work conducted as a subcontractor to CH2M-Hill, under a USEPA Superfund contract.

**Jefferson County Commissioners.** Retained to evaluate the engineering feasibility of reopening and enlarging an existing landfill near the community of Leyden, in Jefferson County. Of particular concern to the Commissioners was the potential for contamination of downgradient groundwater resources. This assignment culminated with a written report to the Commissioners.

**Silverthorne - Dillon Joint Sewer Authority.** Evaluated the technical feasibility of using composted, Class "A" municipal sludge for reclaiming mine tailings, including groundwater, surface water interaction, and contaminant movement.

**ASARCO, Inc.** Expert testimony for ASARCO before the Colorado Water Quality Control Commission in 1991 relative to proposed groundwater classifications and standards on the South Platte alluvium in Metropolitan Denver. Testimony addressed water quality data, implications of proposed regulations relative to ongoing clean up under CERCLA, and generalized aspects of proposed standards for other industries in Denver Metropolitan area. On a separate matter, selected by ASARCO to be engineering expert on litigation that involved alleged groundwater contamination; the plaintiffs ultimately dropped this complaint.

**Vail Associates.** Water quality monitoring, NPDES permitting, and watershed protection planning and design.

**Groundwater Contamination in Wyoming.** Consultant for approximately one dozen entities in a widely publicized groundwater contamination case in Casper, Wyoming involving individual residential water supply wells.

### ***Watershed Management***

**The Garden City Company and The Associated Ditches of Kansas.** Consultant regarding upper Arkansas sub-basin management plan; TMDLs; state water quality standards; endangered species issues; Ogallala Aquifer management plan; Kansas water plan; and general water rights issues.

**Watershed Committee of the Ozarks, City of Springfield Public Works Department, City Utilities and Greene County (All in Missouri).** Consultant on the development of a water quality model to project water quality changes in Pearson Creek as a relevant drainage basin develops under alternative scenarios. Prepared the *Fulbright Spring Protection Study* which comprehensively evaluates the existing groundwater and surface water hydrology of Fulbright Spring and its associated watershed, and which suggests a watershed management strategy to protect spring water quality. Assisted city and county with ordinance and criteria development. Wetlands feasibility evaluation. Evaluation and comment on City's Stormwater NPDES Permit and City's Stormwater Program, in general. Evaluated feasibility of wetlands creation in five locations along Wilson Creek.

**Town of Vail, Vail Valley Consolidated Water Users, Upper Eagle Valley Water and Sanitation District, Vail Associates and others.** Consultant for the preparation and implementation of the *Gore Creek Watershed Management Plan*, which provides a blueprint for the future management of the stream.

**Big Dry Creek Watershed Association and Gore Creek Watershed Alliance.** Retained by these two watershed groups in Colorado to assist with wide-ranging non-point issues, streamflow hydrology, water rights, habitat enhancement and other subjects.

**Aspen Skiing Company - Burnt Mountain Environmental Impact Statement and Other Consulting.** Principal consultant for the Aspen Skiing Company regarding the water resources impacts of a 6,600- skier-at-one-time expansion of the Snowmass Ski area. Subjects evaluated include: adequacy of water rights; land treatment of wastewater; impact on aquatic ecosystems of proposed ski area; channel morphology/stability; changed basin hydrology in response to clear cutting and other development; water quality degradation from point and non-point sources, including soil erosion; planning and design of mitigation measures; field sampling and evaluation; endangered species assessment; hydrologic modeling/hydrologic mass balance; and groundwater impacts.

**Shoal Creek Golf Course and Residential Land Development in Kansas City, Missouri.** Water, sewer, drainage and erosion and sediment control master planning for large development in Kansas City.

**Eagle's Nest Resort Development in Summit County, Colorado.** Project Manager of assignments related to: groundwater investigations; site hydrologic mass balance; landslide evaluation, including field installation of four inclinometers, one dozen piezometers and numerous test pits; testimony and detailed work with Town of Silverthorne to prepare and implement Wetland Protection Ordinance; water rights and water supply; water quality and wetland protection and mitigation; and other water resource studies.

### ***General Water Resources Management, Including Municipal, Agricultural and Industrial Water Supply***

**Water Supply Consultation.** Regarding surface water and/or groundwater supplies for the following representative entities:

- Homestake Mining Company, Lead, South Dakota.
- ExxonMobil (Colorado).
- BP/Amoco (Colorado and Wyoming).
- Coors Brewing Company (Colorado, Virginia and Idaho).
- Adam's Rib Resort (Colorado).
- Arapahoe County Water and Wastewater Authority (Colorado).
- Vail Associates (Idaho).
- Big Sky Resort (Montana).
- U.S. Bureau of Reclamation (North Dakota, California, Nevada and Arizona).
- ARCO Coal Company (Colorado).
- Water Supply and Storage Company (Colorado).
- City of Springfield and Greene County, Missouri.
- University of Colorado.
- U.S. Department of Energy (Colorado).
- Denver Area Council of Boy Scouts of America (Colorado).
- Various Indian tribes including:
  - Umatilla (Oregon)
  - Hopi (Arizona)
  - Council of Energy Resource Tribes (Rocky Mountain Region)
- Intrawest Resorts (Florida, South Carolina, Colorado).
- Snowmaking evaluations for numerous ski areas in Colorado and Montana, and for Colorado Ski Country, USA.

## Jonathan E. Jones, P.E., D.WRE

**Homestake Mining Company, South Dakota.** Quantification of historic municipal water use from 1870s to the present for water system owned and operated by Homestake Mining Company. Expert testimony before state of South Dakota water resources board.

**Contra Costa Water District (California).** Source water supply evaluation, as subconsultant to Carollo Engineers.

**City of Sioux Falls, South Dakota.** Engineering feasibility of proposed greenway along Big Sioux River.

**Industrial Site Location for Major Food Products Company.** Searched multiple western states for suitable location for industrial site in western United States, with dependable supply of high-quality water as primary objective.

**Union Carbide Minerals (Umetco).** Surface water management plan and mined land reclamation plan for hot springs vanadium mine and mill in Hot Springs, Arkansas. Receiving water impact assessment, including biological monitoring. Established and maintained comprehensive hydrology and water quality monitoring program. Groundwater evaluation and hydrologic mass balance. Water quality evaluations for other Umetco properties in Colorado.

**Estes Park Urban Renewal Authority.** Subconsultant to Design Studios West for major river improvements in downtown Estes Park, Colorado.

**Oil And Gas Industry In Rocky Mountain Region.** Water resources impact/mitigation projects in Colorado, Wyoming and Utah for Oxbow Mining, LLC; ExxonMobil; BP/America; Barrett Resources; Unocal, and Council of Energy Resource Tribes.

**J.F. Laing Homes, Colorado.** Consultant on water supply and water quality impacts for proposed 800-acre golf course/residential development to be located immediately upstream from Aurora Reservoir, which serves as public water supply for City of Aurora. Responsible for designing state-of-the-art stormwater quantity and quality management facilities. Responsible for developing irrigation water supply, including the evaluation of multiple alternatives such as utilization of Denver Basin (non-tributary) groundwater; raw water from reservoir; stormwater reuse; and others. In addition, evaluating feasibility of creating wetlands in onsite arroyos.

**Pueblo Urban Renewal Authority.** Subconsultant to Design Studios West for major river improvements in downtown Pueblo, Colorado.

**L.G. Everist, Inc., Colorado (rock products).** Consultant and advisor on wide-ranging topics including wetlands permitting, wetlands "banking," surface water and groundwater hydrology, water rights, water supply, environmental permitting and other subjects.

**Wyoming Water Development Commission.** Working closely with representatives of the Wyoming Water Development Commission and oil companies, developed stream flow and water quality model for the Powder River Basin in Wyoming.

**City of Brighton, Colorado.** Expert testimony regarding the capability of the City of Brighton to provide municipal water supply for the Bromley Park subdivision versus the comparative capability of a local municipal water district. Approach was to perform a "side-by-side" comparison of the capabilities of the City versus the District on such subjects as suitability of existing infrastructure, past performance (compliance) history, financial capability, adequacy of groundwater and surface water supplies (from standpoint of quantity and quality), staff capabilities, etc.

**Mountain Coal Company.** Prepared permit text for submittal to Colorado Department of Minerals and Geology regarding all aspects of surface water and groundwater quantity and quality impacts associated with mining-induced ground subsidence. Comprehensive assessment and modeling of surface and groundwater hydrology and sediment transport, including efforts of storing large quantities of water underground in mined-out “panels.” Preparation of site hydrologic mass balance; landslide evaluations; water rights; and augmentation planning. Wastewater treatment feasibility studies. River morphology/stability evaluation and design. 404 permitting.

**U.S. Fish & Wildlife Service Dam Rehabilitation.** Hydrology and hydraulic studies associated with dam rehabilitation for the U.S. Fish and Wildlife Service in North and South Dakota for three years in mid-1980s.

**Final Design of Rehabilitation Plans and Specifications for Upper Arkansas Water Conservancy District Dams.** Developed plans and specifications for the rehabilitation of two high mountain reservoirs.

**Infrastructure Projects for Boy Scouts of America.** Reconnaissance, preliminary and final design projects for two lakes for the Peaceful Valley Boy Scout Ranch near Colorado Springs, Colorado. Formulation of water rights augmentation and operation plans. Design of water wells and water supply and wastewater treatment systems.

**Lower Colorado River Basin Study for the U.S. Bureau of Reclamation.** Analysis of return flow characteristics associated with “non-contractual” diversions (including wells) from the Colorado River in the reach from Davis Dam to the Mexico border. This included assessing the probable “drawdown” characteristics of wells in the proximity of the lower Colorado River.

**Reconnaissance-Level Dam Study for Water Supply and Storage Company.** Analysis of 32 potential reservoir sites with respect to geology, hydrology, water rights, dam sizing, spillway requirements, and probable environmental impact in Cache la Poudre basin.

**Preliminary Design for Trap Lake II.** Analysis of proposed reservoir site including water rights, basin yield, flood hydrology, financing, and all civil engineering and environmental issues leading to the preliminary design of a 4,400 acre-foot reservoir with a dam height of 85 feet.

**Water Resources Development for EXXON Company, USA.** Pump-tested the Battlement Mesa Colorado River alluvial supply wells and interpreted data. Categorization and ranking of irrigation water requirements for Battlement Mesa. Water supply study. Feasibility study of proposed reservoir on Monument Gulch. Transit loss studies.

**U.S. Bureau of Reclamation.** Engineering assessment of Garrison Diversion Project in North Dakota, and noncontractual water use on Lower Colorado River in Arizona, Nevada and California.

**Reservoir and Lake Assessments and Feasibility Studies.** Representative clients include: ExxonMobil (Colorado); City of Springfield, Missouri; Bowles Metropolitan District (Colorado); City of Winnipeg, Manitoba, Canada; U.S. Fish and Wildlife Service (North and South Dakota); State of Kansas Division of Water Resources and Ground Water Management District #3; Coors Brewing Company; Water Supply and Storage Company (Colorado); City of Rockford, Illinois and Forest Preserve District; multiple Colorado ski resorts; Arco Coal Company (Colorado); McStain Residential Communities (Colorado); City of Boulder, Colorado; City and County of Denver, Colorado; U.S. Department of Energy; Simeon Residential Properties (Colorado).

**Coors Brewing, Ceramics, Glass, and Real Estate Companies.** Project Manager, Managing Principal, or Senior Engineer for the following representative projects:

- Clear Creek water quality and habitat investigations.

## Jonathan E. Jones, P.E., D.WRE

- Groundwater supply investigations, including surface water-groundwater interaction and testimony.
- Water rights implications of relocating historic spring diversions.
- Clear Creek “Cosmic” Agreement to resolve long-standing water quality issues (testimony in water court).
- Chicago Creek reservoir enlargement (testimony in water court).
- Coors Augmentation Plan and Various Water Right Exchanges.
- NPDES Permitting (Stormwater and Municipal and Industrial Wastewater).
- Stormwater Quantity and Quality Management Projects including drainage criteria standards.
- Groundwater Classifications and Standards, Groundwater Contamination Studies, Groundwater Management Strategies, and Groundwater Supply/Hydrology (testimony in administrative hearings).
- Standley Lake Water Quality Study.
- Drainage and Erosion Control Plans for 400-Acre Coors Technology Center.
- Water Resources Evaluation of Great Western Sugar Company’s Johnstown, Colorado, High Fructose Corn Syrup Plant with Respect To: Water Rights; Groundwater and Surface Water Hydrology; Wastewater Treatment; Water Supply of the Town of Johnstown.
- Rolling Hills Country Club - Welch Ditch Landslide.
- Preliminary and Final Design of Multiple Dams and Reservoirs.
- Testimony regarding water quality classification, standards, data, receiving water impacts and related topics for South Platte River, in Denver.
- Dam and Reservoir Inspections.
- Coors Clear Creek Water Rights Operations Computer Model.
- Various Water Rights Evaluations.
- Cooling Water System Evaluation.
- “Pesticide Free” Golf Course Design and Monitoring (Applewood).
- Drought and Flood Risk Assessment.
- Detailed review of stormwater and erosion control plans for numerous developments adjoining Coors’ properties.
- Engineering Assessment of the feasibility of utilizing the Coors Parfet clay pit, located in the town of Golden, Colorado for the disposal of fly ash.
- Other.

**Rocky Flats Environmental Technology Site in Denver, Colorado (Kaiser-Hill, Inc., Rockwell International, EG&G, Inc., Rocky Mountain Remediation Services and U.S. Department of Energy).** Project Manager and/or Managing Principal for the following representative assignments:

- Surface water hydrology, sediment yield and sediment transport modeling and report preparation, focused on the amount of offsite export of plutonium and other radioactive constituents.
- Testimony on stream classifications and standards before the Colorado Water Quality Control Commission.
- Testimony before the Colorado Water Quality Control Commission on site-specific groundwater classifications and standards.

## Jonathan E. Jones, P.E., D.WRE

- Principal author of the *Rocky Flats Surface Water Management Plan*, a document designed to bring Rocky Flats into full compliance with all local, state, and federal surface water regulatory requirements.
- Principal auditor of proposed engineering facilities and associated costs for the roughly \$100 million "Option B" project, consisting of dams, reservoirs, pipelines, pump stations, new raw water supplies, new water treatment plant, and other features to protect and replace downstream public water supplies.
- Written testimony regarding biomonitoring standards.
- Written testimony regarding statewide organic standards.
- Written and verbal testimony regarding radionuclide standards, treatability, and economic impacts.
- Principal engineer for Rocky Flats *Drainage and Flood Control Master Plan*, a comprehensive drainage and flood control plan for 10-square-mile site.
- Consultant on stormwater-related and sanitary wastewater treatment plant NPDES permit matters.
- A-, B- and C-Series and Landfill *Pond Interim Measures and Interim Remedial Action Plan*.
- Consultant on Water Rights.
- Groundwater contamination characterization, movement, interception and treatment.
- Gravel mine impacts on localized groundwater hydrology.
- Auditor of groundwater monitoring program (approximately 500 wells), which resulted in deletion of over 100 wells and streamlined monitoring, at considerable cost savings.
- Principal Engineer on *Rocky Flats Watershed Management Plan*, which focuses on erosion and sediment control, channel stability, and pesticide management and selection.
- In meetings with representatives of the cities of Broomfield and Westminster, and in testimony before the Colorado Water Quality Control Commission (CWQCC) addressed questions regarding probable groundwater pollution sources on the Rocky Flats site, including, for example: the solar ponds, existing landfill, proposed landfill, 881 hillside, and various other "operable units."

**Adam's Rib Recreational Area.** Consultant for the Adam's Rib Recreational Area on water supply, wetland, and water quality issues pertaining to the development of a 2,000-acre resort originally planned to accommodate 10,000 users, including 9,000 skiers at one time. Broad work categories include:

- Comprehensive groundwater monitoring and modeling.
- Vassar Meadow and Joe Goode Meadow hydrologic mass balances.
- Section 401 of *Clean Water Act* permit.
- Section 402 of *Clean Water Act* permit, and wastewater treatment plant design.
- Section 404 of *Clean Water Act* permit.
- Pesticide-free golf course.
- Statistical hydrology and special studies regarding surface water and groundwater hydrology.
- Preparation of *Water Quality Mitigation Plan* for the entire development, a document which addresses all known point and non-point source pollution impacts of the development in the context of Colorado's water quality regulations.
- Characterization of wetland functions under the 404(b)(1) guidelines.
- All aspects of physical and legal water supply, and impacts on minimum stream flows.

## Jonathan E. Jones, P.E., D.WRE

- Many written and verbal presentations to the U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Forest Service, Colorado Division of Wildlife, U.S. Fish and Wildlife Service, Colorado Water Quality Control Division, environmental organizations, and other groups on the issues described above along with general water resources planning matters.
- Erosion/sediment control and stream channel stability engineering design to meet “no net/sediment increase” performance standard.

**Native American Tribes.** Project manager for such tasks as: vulnerability assessments of tribal water supplies; risk assessment posed by pesticide usage; adequacy of proposed erosion and sediment controls; formulation of groundwater and surface water sampling programs and mitigation strategies to address observed problems; development of water supplies; overview of environmental laws; and likely adverse water quality impacts of existing or proposed industrial/commercial development. Projects were completed for the following tribes:

- Umatilla Indian Tribe (Oregon)
- Hopi Tribe (Arizona)
- Acoma Tribe (New Mexico)
- Consortium of Utah Tribes
- Council of Energy Resource Tribes in Denver (technical staff for 52 Indian tribes)
- Pauma Tribe (California)

### ***Expert Testimony***

Qualified as expert witness in federal and state courts and in formal administrative and regulatory hearings for plaintiffs and defendants in the following areas from 1984 to the present:

- Stormwater Quantity and Quality Management (Construction and Post-Construction)
- Water Classifications and Standards
- Receiving Water Impact Analysis
- Public Health Implications of Standards Exceedances
- Surface Water and Ground Water Hydrology and Interrelationships
- Water Quality and Pollution Control (Surface Water and Groundwater)
- Flood Hazard Mitigation and Stormwater Quantity and Quality Management
- Municipal, Industrial and Agricultural Water Supply
- Water Rights/Water Supply/Water Demand/Basin Modeling
- Hydraulics
- Engineering Design and Cost Estimating
- Erosion and Sediment Control

### ***Instructor for Professional Development Courses, Seminars and Conference “Workshops”***

Conferences were offered by the American Society of Civil Engineers, University of Wisconsin Extension Service, CLE (for attorneys), American Society of Landscape Architects and University of Colorado at Denver Department of Continuing Engineering Education. Subject matter addressed includes:

- Overview of Environmental Laws
- Erosion and Sediment Control and Channel Stability

- Receiving Water Impacts of Pollutant Discharges
- General Surface Water and Groundwater Quantity and Quality Issues
- Stormwater Quality Management
- Urban Hydrology
- Design of Urban Drainage Systems
- Hydrology and Hydraulics
- Floodplain Management
- Multipurpose Drainage Design
- Risk Assessment and Benefit/Cost Analysis

## OTHER EXPERIENCE

U.S. Environmental Protection Agency, Washington, D.C., 1979 to 1981 (approximately 1/3 time while a college student.) Comparison of engineering and economic feasibility of land treatment with other forms of municipal wastewater treatment. Guidance to communities concerning acceptable application rates of municipal sludge from the standpoint of nitrate loading. Guidance to communities concerning fee simple acquisition versus leasing of land required for land treatment wastewater systems. Prepared reports relating to “innovative and alternative” forms of wastewater treatment. Reclamation of strip-mined areas in Pennsylvania utilizing domestic sludge as a fertilizer and soil conditioner. Onsite wastewater treatment.

## PROFESSIONAL ACTIVITIES

Editor of *Great Works on Urban Water Resources (1962–2001)*, published by the American Society of Civil Engineers and Environmental and Water Resources Institute, 2006 (887 pages).

Recipient of Environmental and Water Resources Institute 2005 Urban Water Resources Research Council Award for Outstanding Service.

Diplomate (Nominated and Elected) of American Academy of Water Resources Engineers, 2005 to present.

Member (appointed by the Governor of Colorado) of Cherry Creek Basin Water Quality Authority (term started in 2006).

Member Board of Directors, Urban Water Resources Institute (term started in 2006).

Invited Reviewer *Journal of Hydrology*, 2006.

Recipient of 2003 American Society of Civil Engineers State-of-the-Art Civil Engineering Award. Co-recipients Eric Strecker, P.E. GeoSyntec and Ben Urbonas, P.E. Urban Drainage and Flood Control District for development of the USEPA/ASCE *International Stormwater BMP Database*.

Chairman and Principal Author of the 1992 American Society of Civil Engineers and Water Environment Federation *Manual of Practice for the Design and Construction of Urban Stormwater Management Systems* (ASCE MOP No. 77). A Task Committee of approximately 100 engineers from around the United States and Canada prepared this document (724 pages), which was jointly published by ASCE and WEF, and Contributing Author of the 1998 reference, *Urban Runoff Quality Management*, published by WEF and ASCE (WEF MOP No. 23 and ASCE MOP No. 87).

## Jonathan E. Jones, P.E., D.WRE

Awards for Wright Water Engineers, Inc. (WWE) CEO and major owner of WWE, which has received various awards including the 1996 Colorado Ethics in Business Award, and 1999 Society of Financial Professionals National Ethics Award.

Co-Chairman of the August 2001 Conference: *Linking Stormwater BMP Designs and Performance to Receiving Water Impact Mitigation*, Snowmass Village, Colorado, sponsored by the United Engineering Foundation, Environmental and Water Resources Institute of the American Society of Civil Engineers and U.S. Environmental Protection Agency. (Proceedings available from ASCE, Reston, VA).

Advisory Committee Member to the University of Virginia and Colorado State University Departments of Civil and Environmental Engineering, focused on curriculum and accreditation.

Associate Editor of American Water Resources Association Magazine, *Water Resources IMPACT* from 2001 to present.

Conference Chairman of *Experiences with Urban Stormwater BMPs in Colorado* Co-Sponsored by Denver Urban Drainage and Flood Control District and Colorado Association of Stormwater and Floodplain Managers; April 9, 2003, Denver, Colorado.

Invited Member of Technical Review Committee for the Land and Water Fund Stormwater facility construction project in Boulder, Colorado (1 of 25 national "pilot" projects selected by the National Geographic Society), 1997 to 1998.

Member of Conference Organizing Committee for the 1998 ASCE symposia in Chicago, Illinois, "Coordination: Water Resources and Environment," and "Water Resources: A New Era for Coordination." Co-author of policy statement that emerged from symposia, which was signed by approximately fifteen senior members of ASCE regarding National Water Resources Policy, entitled: "*A New Approach to Coordination of Water Development and Environmental Regulations.*" (Published by AWRA in 1999.)

Reviewer of submittals to the Water Environment Research Federation (WERF) publication titled *Water Environment Research* (late 1990s).

Reviewer for the *Irrigation and Drainage Engineering* journal published by the American Society of Civil Engineers (early 1990s).

Technical Reviewer of Chapter 8 "Engineering (Codes, Standards, Practices, Control and Protection Works)," in the *Final Report of the Second National Assessment of Research Needs in Natural Disasters*; published by the National Science Foundation in 1998.

Invited Instructor for the "Emerging Trends in Stormwater Quality" Workshop at the National Precast Concrete Association Annual Convention in Denver, Colorado, February 1997.

Member of the research team conducting a 1999 study for the Water Environment Research Federation titled "Protocol for Wet Weather Effect Assessment and Technology Performance Evaluation."

Member of the research team selected by the EPA in 1998 to prepare the *Guidance Manual for Integrated Wet Weather Flow Collection and Treatment Systems for Newly Urbanized Areas*. Project directed by Dr. James Heaney with the University of Colorado in Boulder.

Chairman of the ASCE Urban Water Resources Research Council (1992 to 1996) and Secretary of Council from 1989 to 1992. Also, member of Special Committee (four members) of ASCE Water Resources Planning and Management Division to evaluate the future role of this Division, given ASCE's 1996 "Strategic Plan" for the future.

## Jonathan E. Jones, P.E., D.WRE

Reviewer for the Water Environmental Research Federation and American Society of Civil Engineers of various draft technical and policy documents prepared by the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers (USACE), in early-mid 1990s.

Presenter at Town of Snowmass Village Seminar on “Sediment and Erosion Control Techniques and Regulatory Requirements” on October 10, 1996 at the Snowmass Village Conference Center.

Instructor at the WERF Workshop on “Research Needs in Urban Stormwater” on October 5, 1996 at the Annual Meeting of the Water Environment Federation in Dallas, Texas. Published June 1997.

Invited Reviewer of August, 1996 Draft EPA document titled “Wet Weather Research Plan” (invited by the USEPA), through the ASCE Urban Water Resources Research Council).

Session Chairman and Conference Co-Organizer of “Effects of Watershed Development and Management on Aquatic Ecosystems” held at the Snowbird Resort in Utah, August 4-9, 1996. Co-sponsors: American Society of Civil Engineers; Engineering Foundation, and U.S. Environmental Protection Agency (including financial support).

Conference Organizing Committee Member and Session Chair of “Effects of Watershed Development and Management on Aquatic Ecosystems,” Snowbird, Utah, 1996 funded by the EPA, APWA and United Engineering Foundation.

Chairman of the February 1996 conference in Denver, Colorado, entitled, “Planners, Engineers, and Waterways,” sponsored by ASCE, AWRA, AWWA, CDOW, ASLA, APA, UDFCD, DRCOG and other organizations.

Reviewer of *Greenways, A Guide to Planning, Design and Development*. Published by the Conservation Fund, Flink, C.A. and R. M. Searns. 1995.

Reviewer of U.S. Army Corps of Engineers *Handbook for Stormwater Pollution Prevention Plans* at the request of the Civil Engineering Research Foundation. 1995.

Session Chairman of *Stormwater NPDES Related Monitoring Needs*. Conference sponsored by the EPA, Engineering Foundation and ASCE in Crested Butte, Colorado, August 1994.

Chairman of the national conference entitled: “National Water Resources Regulation - Where is the Pendulum Now?” sponsored by American Society of Civil Engineers, American Bar Association, U.S. Environmental Protection Agency, U.S. Geological Survey, U.S. Army Corps of Engineers, American Water Resources Association, American Geophysical Union, American Public Works Association and others, held in Washington, D.C., on January 31-February 1, 1994.

Liaison between the ASCE Urban Water Resources Research Council and ASCE’s Water Resources Planning and Management Division for the organization of the May 1993 Annual Meeting of the ASCE Water Resources Planning & Management Division in Seattle, Washington.

Reviewer of the McGraw-Hill *Handbook of Hydrology*; David R. Maidment, Principal Editor, published by McGraw-Hill in 1993.

Conference Co-Chairman of the *Effects of Urban Runoff on Receiving Systems: An Interdisciplinary Analysis of Impacts, Monitoring and Management*, Mount Crested Butte, Colorado, August 4-9, 1991. Sponsored by Engineering Foundation, ASCE, and WPCF with speaker funding provided by EPA.

Program Co-Chairman of the “Colorado Environmental Regulation - Where is the Pendulum Now?” Two-day conference sponsored by the Colorado Bar Association, ASCE, APWA, AWRA, WPCA, CGWA, CHWS and UDFCD; April 24-25, 1991, Denver, Colorado.

## Jonathan E. Jones, P.E., D.WRE

Invited Engineering Consultant to provide verbal and written presentation titled "Technical and Engineering Aspects of EPA Stormwater NPDES Regulations" prepared for the Utility Water Act group -- a consortium of American Electrical Power Companies (February 1991).

Technical Reviewer for Van Nostrand Reinhold Publishing Company, New York, New York. 1991.

Control Group Member of the ASCE Task Committee to Evaluate Impacts to Aquatic Life Forms Posed by Urban Runoff Pollution. (1990-1991).

Technical Reviewer for Prentice Hall in 1990.

Program Chairman of the October 1988 Denver Metropolitan Area Urban Runoff Quality Conference held at the Stapleton Airport Holiday Inn (Cosponsored by ASCE/APWA/AWRA and Denver Urban Drainage & Flood Control District).

Member, Conference Organizing Committee and Session Chairman of the American Society of Civil Engineers and Engineering Foundation, EPA Conference on Urban Runoff Quality Mitigation Measures held at Trout Lodge in Potosi, Missouri in July 1988.

Reviewer of professional papers for the ASCE *Journal of Water Resources Planning and Management Division* (1986 and 1987).

Session Chairman of the ASCE/Engineering Foundation/EPA Conference: "Urban Runoff Quality: Its Impacts, Quality and Enhancement." Henniker, New Hampshire. 1986.

Advisor to the Water Environment Federation and American Society of Civil Engineers on Continuing Engineering Education Programs, 1989-1991.

State of Colorado Board of Registration for Professional Engineers and Land Surveyors. Consultant for the investigation of professional practice charges against professional engineers (late 1980s).

## PUBLICATIONS

Earles, T.A., J.E. Jones, J. Clary, D. Rapp. 2006. "Consideration of Residual Floodplain and On-Site Detention in Watershed Master Planning." *Proc. Colorado Association of Stormwater and Floodplain Managers Annual Conference*, Glenwood Springs, CO, September 27-29, 2006.

Jones, J.E., D. Rapp, W. Wenk, P. Thomas. 2006. "Impediments to Innovative Urban Water Resources Management." *Proc. Colorado Association of Stormwater and Floodplain Managers Annual Conference*, Glenwood Springs, CO, September 27-29, 2006.

Jones, J.E., J. Guo, B. Urbonas, R. Pittinger. 2006. "Safety at Urban Stormwater Ponds". *Stormwater*. January/February 2006. Vol.7, No. 1.

Jones, J.E., T. E. Earles, T. Browning, B. Hyde, D. Hartman, B. DeGroot, B. Urbonas. 2005. "Flood Hazard Notification on Small Tributaries not Mapped by FEMA." *Proc. Colorado Association of Stormwater and Floodplain Managers Annual Conference*, Steamboat Springs, CO, September 21-23, 2005.

Farahmandi, S., B. Urbonas, A. Sorrel, T. Christianson, J.E. Jones, and J. Clary. 2005. "City and County of Denver Storm Drainage Criteria Manual Update." *Proc. Colorado Association of Stormwater and Floodplain Managers Annual Conference*, Steamboat Springs, CO, September 21-23, 2005.

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- Jones, J.E. et al. 2005. "Urban Storm-Water Regulation – Are Impervious Area Limits a Good Idea?" *Journal of Environmental Engineering*. American Society of Civil Engineers. February.
- Strecker, E., M. Quigley, B. Urbonas, and J.E. Jones. 2004. "Stormwater Management, State of the Art in Comprehensive Approaches to Stormwater". *The Water Report - Water Rights Water Quality and Water Solutions in the West*. August 15.
- Baus, T., J.E. Jones, J. Wulliman, and P. Thomas. 2005. "Denver Water Quality Management Plan – Process Overview and Lessons Learned". *Proc. Emerging Technologies and Practices in Urban Stormwater Management*. Urban Drainage and Flood Control District. Denver. April 28.
- Jones, J.E. and J.K. Clary. 2005. *Positive Signs for American Watersheds in 2005*. Prepared for February 2005 Meeting of American Water Resources Association in Tucson, Arizona regarding National Water Policy Dialogue.
- Earles, T.A. and J.E. Jones 2004. *Colorado (USA) Water Rights: Ideas for China*. Proceedings of the 4th International Conference on Watershed Management, Shenzhen, China, December 13-15, 2004. American Society of Civil Engineers, Environmental & Water Resources Institute.
- Baus, Terry, J.E. Jones and J.K. Clary. September 2004. "Overview of Denver Water Quality Protection Plan" *Proceedings of the 2004 Annual Meeting of the Colorado Association of Stormwater and Floodplain Managers*.
- Jones, J.E. September 2004. "Introduction: Multipurpose Water Resource Planning and Design," *Water Resources IMPACT*, published by the American Water Resources Association in Middleburg, VA, Volume 6, Number 5.
- Strecker, E.W., M.M. Quigley; B. Urbonas, J.E. Jones. 2004. "Analysis of the Expanded EPA/ASCE International BMP Database and Potential Implications for BMP Design." *Salt Lake City EWRI Conference Proceedings*. Proceedings available from American Society of Civil Engineers in Reston, VA.
- Jones, J.E., T.A. Earles, E.A. Fassman, J.T. Doerfer and J.E. Carroll. January 2004. "Grant Ranch Stormwater-Quality Management Program." *STORMWATER*. Santa Barbara, CA, pp.12-22.
- Jones, J.E. 2003. "Overview and Key Themes of Seminar: Experience with Urban Stormwater Best Management Practices (BMPs) in Colorado." *Proc. of the Denver, Colorado 2003 Experience with Best Management Practices in Colorado Conference*. Denver, CO: UDFCD.
- Carroll, J., E. Payson, J.E. Jones, M. Gavin and C. Hawley. 2003. "Grant Ranch Stormwater Treatment System/Bow Mar Lake." *Proc. of the Denver, Colorado 2003 Experience with Best Management Practices in Colorado Conference*. Denver, CO: UDFCD.
- Jones, J.E. 2002. "Overview of Significant Contributions of ASCE's Urban Water Resources Research Council from 1956-Present." *Proc. of the Washington, DC 2002 Civil Engineering Conference and Exposition-ASCE's 150<sup>th</sup> Anniversary Convention*. Reston, VA: ASCE.
- Jones, J.E., B. Urbonas, L. Roesner, R. Field and S. Yu. 2002. "Republication of Important Documents of the ASCE Urban Water Resources Research Council," *Environmental and Water Resources History*, (edited by Jerry R. Rogers and Augustine J. Fredrich) published by the American Society of Civil Engineers ISBN: 0-7844-0650-2, published November 2002, Stock #40650.
- Jones, J.E., J. Carroll and E. Payson. 2002. "Case Study in Smart Growth: Grant Ranch Stormwater Quality Agreement." *Proc. of the Fourth Annual Cherry Creek Stewardship Partners Conference, Celebrating Stewardship Through Collaborative Efforts*. Denver, CO: UDFCD.

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- Jones, J.E., E. Strecker, and B.R. Urbonas. 2002. "Status of the ASCE/USEPA National Stormwater BMP Database," *EWRI Currents*, July 2002, ASCE.
- Urbonas, B.R. and J.E. Jones. 2002. "Summary of Emergent Conference Themes at the August, 2001 Conference." *Proc. of the Engineering Foundation Conference, Linking Stormwater BMP Designs and Performance to Receiving Water Impacts Mitigation*. New York: The Engineering Foundation.
- Jones, J.E. and B.R. Urbonas. 2002. "Summary of Presentations at the August, 2001 Conference." *Proc. of the Engineering Foundation Conference, Linking Stormwater BMP Designs and Performance to Receiving Water Impacts Mitigation*. New York: The Engineering Foundation.
- Jones, J.E. 2001. "Overview: BMP Performance and Receiving Water Impacts," *Water Resources IMPACT*, November 2001.
- Earles, T.A., J. Jones and W.F. Lorenz. 2001. "Case Studies of Local Strategies for Control of Non-Point Source Pollution in Colorado (USA)," *Advances in Urban Stormwater and Agricultural Runoff Source Controls*, 81-93. *The Netherlands: Kluwer Academic Publishers*.
- Earles, T.A. and J.E. Jones. 2001. "Modeling Watershed Protective Strategies for Aurora Reservoir Watershed," *Third International Conference on Watershed Management held in Taipei Taiwan*, September 2001.
- Fischer, J.S., J. Jones, and D. Brown. 2001. "Beneficial Reuse of Dewatering Water from a Coal Bed Methane Mining Operation," *Proc. RMSAWWA/RMWEA Joint Annual Conference, Angel Fire, NM, September 11, 2001*.
- Clary, J.K., B.R. Urbonas, J.E. Jones, E. Strecker, M. Quigley and J. O'Brien. 2001. "Developing, Evaluating and Maintaining a Standardized Stormwater BMP Effectiveness Database" *Water, Science and Technology*.
- Masters, S., N. Fleck-Tooze, L. Jha, G. Johnson, J. Jones, R. Wolf, and A. Zygielbaum. 2001. "Stormwater Management—A Lincoln, Nebraska Initiative." *Proc. of the 2001 Annual Conference of the Water Environment Federation, Atlanta, Georgia*.
- Jones, J.E. and K.A. McKenzie. 2001. "Overview of Volumes I and II of the June 2001 *Urban Storm Drainage Criteria Manual*", prepared for the September 2001 annual meeting of the Colorado Association of Stormwater and Floodplain Managers, Steamboat Springs, Colorado.
- Strecker, E., M. Quigley, B. Urbonas, J. Jones and J. Clary. 2001. "Determining Urban Stormwater BMP Effectiveness." *ASCE Journal of Water Resources Planning and Management*. Vol. 127, No. 3. June 2001.
- Clary, J.K., B.R. Urbonas, J.E. Jones, E. Strecker and M. Quigely. 2001. "Developing and Evaluating a Stormwater BMP Effectiveness Database." *Proc. of the Novatech 2001 Conference, Lyon-Villeurbanne, France*. June 25-27, 2001.
- Clary, J.K., J. Kelly, J. O'Brien, J. Jones and M. Quigley. 2001. "National Stormwater Best Management Practices Database: A Key Tool to Help Communities Meet Phase II Stormwater Requirements." *Stormwater Magazine*. Vol. 2, No. 2. March/ April 2001.
- Wright, K.R. and J.E. Jones. 2000. "Viele Lake Channel 25 Years Later." *Flood Hazard News*, Volume 30, No. 1, Urban Drainage and Flood Control District, Denver, CO.

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- Jones, J.E. and T.A. Earles. 2000. "Best Management Practices for Development Projects in the Rocky Mountains." Inaugural Session of the Water Congress of the ASCE Environmental and Water Resources Institute. Orlando, Florida. Washington, D.C.: ASCE. May 20-24, 2001.
- Jones, J.E., T.A. Earles, W.F. Lorenz. 2000. "Case Studies of Local Strategies for Control of Non-Point Source Pollution in Colorado (USA)." NATO Advanced Research Workshop on Source Controls, St. Marienthal, Germany. November 8-12, 2000.
- Jones, J.E., J.K. Clary, J. O'Brien, B. Urbonas, E. Strecker and M. Quigley. 2000. "Development of National Stormwater BMP Database." Southeast Stormwater Manager's Conference, Orlando, FL. June 28, 2000.
- Jones, J.E. and J.K. Clary. 1999-2000. Co-authors of short articles on the "ASCE-USEPA National Urban Stormwater BMP Database" in issues of such periodicals as *Public Works*, *Civil Engineering News*, *Newsletter of the North American Lake Management Society*, *Wet Weather News* (published by the Water Environment Federation), monthly news letter of the *American Water Works Association*, *Civil Engineering*, and others.
- Jones, J.E. 2000. "Water Quality Constraints to Water Development." *Proc. of the American Water Works Association 2000 Annual Conference*, Denver, Colorado, June 11-15.
- Jones, J.E. 1999. "Western United States Water Rights," presented at *Watershed '99—Watershed Management Policy, Science and Technology*. A forum at the Doubletree Hotel, Charlottesville, Virginia sponsored by the University of Virginia, School of Engineering and Applied Science and National Taipei University of Technology, Taiwan, ROC; co-sponsored by USEPA Office of International Activities, National Taiwan University and Overseas Chinese Environmental Engineers and Scientists Association. April 8 – 9.
- Jones, J.E., J.K. Clary and E.W. Brown. 1999. Chapter 11, "Institutional Arrangements" of *Innovative Urban Wet-Weather Flow Management Systems* published by EPA for ASCE and the University of Alabama at Birmingham. (EPA/600/R-99/029).
- Jones, J.E. (Contributing Author). 1998. *Urban Runoff Quality Management*, published by WEF and ASCE (WEF MOP No. 23 and ASCE MOP No. 87).
- Clary, J.K., J.E. Jones and E.W. Brown. 1997. "Stormwater Management for Municipalities: Challenges and Solutions." *Proc. of the Seven Southern States Environmental Conference and Exhibition. Biloxi, Mississippi*. September 23 - 25.
- Jones, J.E., J. Clary and T. Brown. 1997. "Urban Stormwater Management Institutions for the 21<sup>st</sup> Century" *Development of Methodologies for the Design of Integrated Wet-Weather Flow Collection/Control/Treatment Systems for Newly Urbanizing Areas, Volume 1: Technical Report*. Published by the U. S. Environmental Protection Agency Wet Weather Flow Program in Edison, New Jersey and the U. S. Environmental Protection Agency National Risk Management Research Laboratory at the Office of Research and Development in Cincinnati, Ohio. August.
- Brown, T., T. Davidson and J. Jones, P.E. 1997. "Water Quality Management Considerations at Keystone Resort" *Proc. of the 1997 Annual Meeting of the American Water Resources Association*. Conference held in July 1997 at Keystone Conference Center. Proc. available through American Water Resources Association (AWRA) in Washington, D.C. July.
- Jones, J.E. 1997. "Overview of Water Quality Management in the Lake Dillon, Colorado Watershed" *Proc. of the 1997 Annual Meeting of the American Water Resources Association*. Conference held in July 1997 at Keystone Conference Center. Proc. available through American Water Resources Association (AWRA) in Washington, D.C. July.

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- Brown, E.W., J.E. Jones, and J.K. Clary. 1997. "Criteria for Variable-Width Mountain Stream Buffers" *Aesthetics in the Constructed Environment - Proc. of the 24<sup>th</sup> Annual Water Resources Planning and Management Conference*. ASCE, Houston, Texas. April 6 - 9.
- Rowney, A.C. and J.E. Jones. 1996. "Development of An Annotated Bibliography on the Preservation and Restoration of Riverine Corridors in Urban Areas" *Proc. of the 1997 Annual Meeting of ASCE's Water Resources Planning and Management Division*. ASCE, Washington, D.C. December.
- Wright Water Engineers, Inc. (Jones, J.E., contributing author). 1996. "Guidelines for Water Quality Enhancement at Golf Courses Through the Use of Best Management Practices." Colorado Non-point Source Task Force. Denver, CO: Denver Regional Council of Governments.
- Jones, J.E., S. Anderson, J. Fognani, F.R. McGregor, and T. Axley. 1996. "Stormwater Best Management Practices - When is Sediment Considered Hazardous?" *Water Environment and Technology*. October.
- Jones, J.E., J.M. Kelly, J.K. Clary, and E.W. Brown. 1996. "Colorado Regulations for Preserving Riparian Corridors." *Proc. of the Colorado Association of Stormwater and Floodplain Managers Conference*. Vail, Colorado. September.
- Brown, E.W., J.E. Jones, J.K. Clary, and J.M. Kelly. 1996. "Riparian Buffer Widths at Rocky Mountain Resorts," *Proc. of the Conference: Effects of Watershed Development and Management on Aquatic Ecosystems*. Snowbird, Utah. (Proc. available from the Engineering Foundation in New York, New York, and the American Society of Civil Engineers in Washington, D.C.). August.
- Franklin, J. S., W.P. Doan, R.H. Houghtalen, and J.E. Jones. 1996. "A Procedure for Hydrologic Analyses of Constructed Wetlands for Combined Environmental Enhancement and Flood Control." *Proc. of the Seminar, Water for Agriculture and Wildlife and the Environment - Win-Win Opportunities*. Published by the USBR and U.S. Committee on Irrigation and Drainage. June.
- Jones, J.E., D.W. Kimsey, D.B. Mehan, E.A. Benjamin. 1996. "Integrated Pest Management at Golf Courses Protects the Environment." Colorado Division of Wildlife, *Urban Wildlife Newsletter*. Number 24. April.
- Jones, J.E. 1996. "Planners, Engineers and Waterways: The Essential Need for Collaboration." *Proc. of the Conference Planners, Engineers and Waterways*. Available through the Colorado Chapter of AWWA, Denver, Colorado. February.
- Jones, J.E., J.K. Clary, E.W. Brown, and J.M. Kelly. 1996. "Riparian Corridor Protection and Rocky Mountain Resorts." *Proc. of the National Symposium on Assessing the Cumulative Impacts of Watershed Development on Aquatic Ecosystems and Water Quality*. Chicago, Illinois. March.
- Smith, T., J.E. Jones, L. Bullard, and J. Witherspoon. 1996. "Fulbright Springs Watershed Protection Plan." *Proc. of the National Symposium on Assessing Cumulative Impacts of Watershed Development on Aquatic Ecosystems and Water Quality*. Chicago, Illinois. March.
- Jones, J.E., et al. 1995. "Beware the Sediment Scare." *Civil Engineering Magazine*. July.
- Jones, J.E., et al. 1995. "The Bottom Line on the Fulbright Spring Protection Study." *Proc. of the Ninth Annual Watershed Conference*. Sponsored by the Watershed Committee of the Ozarks. Springfield, Missouri. June.

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- Herricks, E.E. (Chief Editor) and J.E. Jones (one of many contributing authors). 1995. *"Effects of Urban Runoff on Receiving Systems: An Interdisciplinary Analysis of Impacts, Monitoring and Management."* Lewis Publishers.
- Jones, J.E. 1995. "BMPs and Hazardous Sediment." *Public Works Magazine*, Vol. 126, No. 6. May.
- Jones, J.E. 1995. "Revisiting the National Environmental Pendulum Conference." *Proc. of the Annual Conference of the American Society of Civil Engineers Water Resource Planning and Management Division*. Boston, Massachusetts. May.
- Jones, J.E. and B.R. Urbonas. 1996. "Interrelating Stormwater Runoff Quantity and Quality Design Considerations." Chapter in *Water Environment Federation/American Society of Civil Engineers Manual of Practice on Urban Stormwater Quality Management*. To be published in late 1996 or early 1997 by the Water Environment Federation in Alexandria, Virginia.
- Jones, J.E. 1994. "National Pollutant Discharge Elimination System (NPDES) Permits and Procedures." Course notes from one of the "education sessions" at the American Society of Landscape Architects Annual Meeting and Exhibition. San Antonio, Texas. October.
- Jones, J.E., et al. 1994. "Four Season Resort Makes Strong Commitment to Riparian Corridor Preservation and Enhancement." *Proc. of the Arid West Conference*. Sponsored by the Colorado Association of Stormwater and Floodplain Managers. Telluride, Colorado. September.
- Jones, J.E. 1994. "Overview of Stormwater Quantity and Quality Management - Regulatory and Engineering Considerations." Presentation to the American Society of Landscape Architects - Colorado Section at its Annual Meeting. Vail, Colorado. September.
- Jones, J.E. and S. Anderson. 1994. "Can Sediments That Accumulate in Urban Stormwater Best Management Practices be Classified as Hazardous Wastes Under RCRA?" *Proc. of the Conference, Stormwater NPDES-Related Monitoring Needs*. Co-sponsored by the Engineering Foundation, U.S. Environmental Protection Agency and American Society of Civil Engineers. August.
- Jones, J.E. 1994. "Welcome from the Urban Water Resources Research Council and Historical Perspective." *Proc. of the Conference Stormwater NPDES-Related Monitoring Needs*. Sponsored by the Engineering Foundation, American Society of Civil Engineers, and U.S. Environmental Protection Agency. August.
- Jones, J.E. 1994. "Receiving Water Impacts Associated with Urban Stormwater Discharges - An Overview." *Proc. of the CASFM Annual Conference*. Estes Park, Colorado. July.
- Jones, J.E. 1994. "Introduction and Purpose of the National Environmental Conference." *Proc. of the Conference National Water Resources Regulation - Where is the Pendulum Now?* Sponsored by ASCE, ABA, USEPA, USCDE, AWRA, and many other organizations. Georgetown University Conference Center. Washington, D.C. January.
- Jones, J.E. 1993. "Citizen Initiatives from Around the United States to Protect Water Resources." Luncheon talk prepared for the Annual Meeting of the Watershed Committee of the Ozarks. Springfield, Missouri. July.
- Jones, J.E. 1993. "Erosion and Sediment Control - Legal and Institutional Considerations." *Proc. of the Conference on Erosion and Sediment Control Management*. Co-sponsored by the State of Missouri Department of Natural Resources, Greene County, City of Springfield and Watershed Committee of the Ozarks. Springfield, Missouri. July.

## Jonathan E. Jones, P.E., D.WRE

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## Jonathan E. Jones, P.E., D.WRE

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