## James L. Balliet

# FACILITIES PLANNING DIRECTOR AND CORPORATE SECRETARY

Extensive environmental engineering experience in wastewater, drinking water, stormwater, solid waste, hazardous waste and environmental assessments. Comprehensive expertise in water and wastewater facilities planning and process design. Thorough project experience including planning, design, funding, construction administration and facility start-up and operation. Capital project experience current value exceeds \$600 million. Member of Board of Directors and Corporate Secretary since 1996.

#### **Key Projects**

Water Treatment System Improvements, Altoona City Authority, Blair County, PA. Conducted extensive pilot studies and source water treatment for the Altoona reservoir system which includes nine reservoirs. Completed design and provided operational assistance for seven new water treatment facilities with 28 million gallons per day (MGD) capacity totaling \$50 million. Ground-breaking work in the design of direct filtration systems, ozonation-oxidation pretreatment, backwash solids decant system, chemical coagulation using zeta-potential and related process treatment system.

Fort Loudon Water Treatment Facility, Bear Valley Water Authority, Franklin County, PA. Project principal for \$11 million membrane filtration facility and the development of five new groundwater sources.

Potomac River Water Treatment Facility, Berkeley County Public Service Water District, Berkeley County, WV. Project principal for pilot study, process design, permitting, commissioning and operation of an \$18 million water treatment facility using conventional clarification, submerged membrane filtration, and UV/chlorine disinfection.

Laurel Creek Water Filtration Plant, Municipal Authority of the Borough of Lewistown, Mifflin County, PA. Project principal for the planning and design of an \$8 million upgrade and expansion of an Aldrich filtration plant (6.0 MGD). Project elements included ozonation pretreatment, conventional multi-media filtration system, pumping facilities, plant hydraulics, process mechanical piping systems, water transmission mains and steel water storage tanks.

North Fork Creek Water Treatment Facility, Brookville Municipal Authority, Jefferson County, PA. Project principal for the \$12 million North Fork Creek Membrane Filtration Water Treatment Facility (2.25 MGD) including pilot testing, membrane filtration, groundwater source development and new surface water intake.

#### **Education**

MS - Water Resources, Penn State University

BS - Environmental Resources Management, Penn State University

#### Certification

Pennsylvania State Board of Certification of Waterworks Operators License: Water Class A, E Subclass 1-14 Wastewater Class A, E Subclass 1-4 40-Hour Health and Safety Training Certification

#### Affiliations

American Waterworks Association PA Rural Water Association PA Water Environment Association -Central Section Waterworks Operator Association WV Rural Water Association

#### **Honors**

PA Governor's Award for Environmental Excellence - 1999 Pennsylvania State University, BS-Highest Distinction, 1988 Pennsylvania State University, MS-Highest Distinction, 1990 Pennsylvania State University Grad Research Exhibition -1st Place, 1990 Pennsylvania State University Mayne Educational Academic Award Gamma Sigma Delta Honor Society



#### **Publications & Presentations**

"Land Application & Biosolids" 2016 Annual Conference, PA Rural Water Association, State College, PA

"Engineering Services Required for a Water System Improvements Project", Pennsylvania State University, Civil Engineering 472W Capstone Design Lecture Series, 2014.

"Wastewater Conveyance System Modeling and Monitoring", 2014 Annual Technical Conference, PA Water Environment Association, State College, PA.

"Greensand Filtration-Proper Operation and Maintenance", 2013 Conference, PA Rural Water Association, State College, PA.

"Wastewater Treatment-Nutrient Removal", St. Francis University Environmental Engineering Lecture Series 2012.

"The Use of Membrane Filtration for Public Water and Wastewater Systems", 2012 Conference, PA Rural Water Association, Mars, PA

"Strategies to meet the Chesapeake Bay Nutrient Limits", 2011 Annual Conference, PA Rural Water Association, State College, PA

"Nutrient Removal Strategies to Comply with the Chesapeake Bay Requirements", 2010 Annual Conference, PA Municipal Authorities Association, Pittsburgh, PA

"Membrane Filtration for Water and Wastewater Systems", 2007/2008 PRWA Pro Operator Training Series, Statewide Training, Eight Locations, PA

"Use of Membrane Filtration for Rural Water Systems in West Virginia", 2006 Annual Conference, WV Rural Water Association, Canaan Valley, WV

#### Moose Creek Water Treatment Facility, Clearfield Municipal Authority,

**Clearfield County, PA.** Project manager and designer of an \$8 million water treatment facility (1.0 MGD) using pre-oxidation, membrane filtration and UV/ chlorine disinfection. Project included a 1.5 MG steel water storage tank and well field development.

**Moorefield Water Treatment Facility, Town of Moorefield, Hardy County, WV.** Project principal for feasibility study (5 MGD), pilot testing and design/permitting of a new \$24 million membrane filtration facility surface water intake, water main and 1.5 MG storage tank.

**Moundsville Water System, City of Moundsville, Marshall County, WV.** Project manager and designer for pilot study program, process design and permitting of an \$18 million 5.0 MGD ozonation, direct filtration and nanofiltration treatment facility.

Alexandria Wastewater Treatment Facility, Alexandria Borough Porter Township Joint Sewer Authority, Huntingdon County, PA. Project manager and designer for planning, design, permitting and construction administration of a \$15 million wastewater treatment facility and collection system extension project.

Biological Nutrient Removal (BNR) Wastewater Treatment Facilities Upgrade and Expansion, Altoona City Authority, Blair County, PA. Project manager and designer for the expansion and upgrade of the process design, start-up and operation of the \$70 million Easterly (35 MGD) and Westerly (60 MGD) BNR wastewater treatment facilities.

Wastewater Residuals Soils Land Application Disposal Project, Altoona City Authority, Blair County, PA. Project manager for the development of the wastewater biosolids management plan through agricultural utilization. Obtained DEP approval of report and assisted in plan implementation.

### Saxton Wastewater Treatment Facility, Saxton Borough Municipal Authority, Bedford County, PA

Completed design, permitting and construction of a 600,000 gpd advanced wastewater treatment facility including nutrient removal and various collection system and pump station improvements at a cost of \$7 million.

BNR Wastewater Treatment Facility Upgrade and Expansion, Clearfield Municipal Authority, Clearfield County, PA. Project manager and designer for \$35 million upgrade and expansion of the Clearfield wastewater treatment facility (25 MGD) to biological nutrient removal. Project elements included new raw sewage lift station, new headworks (fine screening and vortex grit separator), BNR reactors, final clarifiers, UV disinfection, control building, aeration and mixing and systems aerobic digestion conversion.

**Regional Wastewater Collection and Treatment System, Osceola-Rush-Decatur Sewer Authority, Centre & Clearfield Counties, PA.** Project manager for the design, permitting and construction of a \$17 million regional wastewater treatment system (0.4 MGD), 25 mile collection system and five pump stations.