

WATER RESOURCES



PROFILE



BUCHART HORN
ENGINEERS • ARCHITECTS • PLANNERS



Scott E. Russell, PE
Vice President – Water Resources

Protecting our most valuable resource is the driving force behind our water resources services

At BH, our engineers and scientists are dedicated to providing sustainable, resilient water resources solutions for the communities we serve. Our interdisciplinary teams design pragmatic approaches to address today's challenges while anticipating those confronting future generations. Our commitment to protecting water has endured for more than 70 years, and we look forward to working with you to build upon that foundation for your community's tomorrow.





WATER

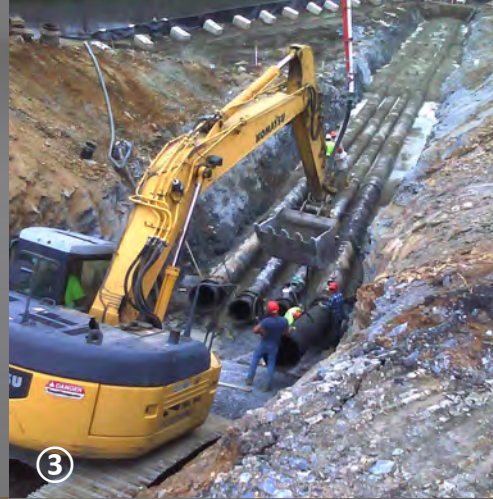
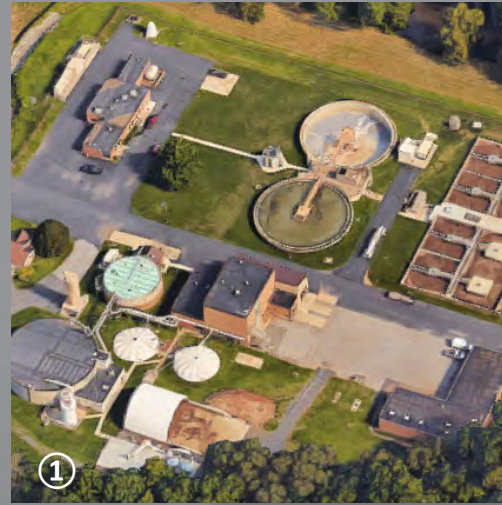
BH has a strong history of delivering conventional and advanced treatment system designs providing high quality, safe drinking water to the communities we serve. We take pride in working with our clients to develop resilient designs to respond to changing environmental conditions while adapting to evolving regulatory requirements. Our professional staff specializes in:

- Water master plans
- Process design
- Pumping system design
- Instrumentation design (SCADA)
- Water transmission design
- Water distribution modeling
- Energy optimization
- Water quality analysis
- Start-up operations
- Rate analysis
- Regulatory assistance
- Vulnerability analysis
- Safety and security analysis
- Maintenance and inspection
- Construction services

- Inset: Point Township Tank and Connecting Main, PA American Water
1. Five Forks Water Treatment Facility, James City Service Authority
 2. Marsh Creek Water Treatment Plant Renovations and Upgrade, Gettysburg Municipal Authority
 3. Canal Road Water Treatment Plant Electrical/Instrumentation and Controls Design/Build, NJ American Water
 4. Grantley Road Treatment Plant Sedimentation Basin and Residuals Handling, The York Water Company
 5. Flow Meter Installation for Sedimentation Basin, Raritan Millstone Plant, NJ American Water

Let's develop our water resources to sustain future generations together.





WASTEWATER

BH provides a variety of wastewater services for clients throughout the United States. Our engineers approach new and rehabilitative design challenges focused on delivering cost-effective, advanced solutions that achieve regulatory compliance. Our extensive and varied experience in wastewater engineering includes:

- Sewage facility planning
- Capacity evaluation
- Sewer system modeling
- Collection/conveyance
- Process evaluation/study
- Regulatory compliance
- Nutrient removal
- Preliminary treatment
- Primary treatment
- Activated sludge
- Biosolids
- Digestion
- Dewatering
- Pump stations
- Construction services
- Operations assistance
- Cost estimating
- Financial assistance

Let's put our energy toward reclaiming our water together.

- Inset: Back River Egg-Shaped Digesters, City of Baltimore DPW
1. Wastewater Treatment Facility BNR Upgrade Design, Lower Allen Township Authority
 2. Biosolids Upgrade and Improvements, Susquehanna Water Pollution Control Facility, Lancaster Area Sewer Authority
 3. Poorhouse Run Siphon Replacement and Interceptor Study, York City Sewer Authority
 4. Wastewater Treatment Plant Improvements, York City Sewer Authority
 5. Design for Replacement of Co-Generation System, Wastewater Treatment Plant, York City Sewer Authority
 6. Coatesville Wastewater Treatment Plant Upgrade and Expansion, PA American Water





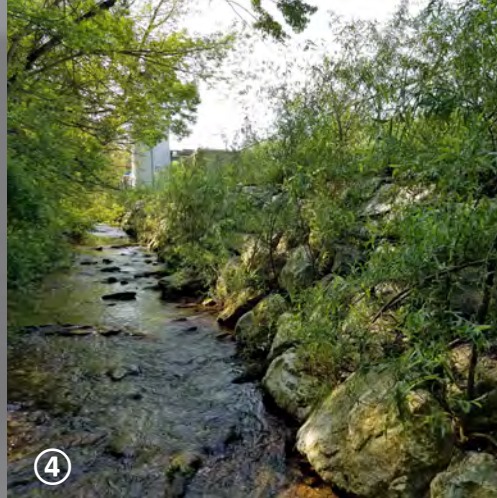
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Inset: Riverfront Park Bank Stabilization, Flood Control, and Construction Management, City of Sunbury

1. School Street Parking Lot Green Infrastructure Project, Borough of Etna
2. Waterfront Redevelopment, Bellefonte Area Industrial Development Authority
3. Research Boulevard Bridge Stabilization and Stream Restoration, Hershey Center for Applied Research, Hershey Trust Company
4. Stream Bank Improvement, New Freedom Borough
5. Green Streetscape Project, Phase I, Borough of Etna
6. Civil Engineering Services, Hershey Center for Applied Research, Hershey Trust Company



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STORMWATER

BH's experienced civil engineering group provides safe and sustainable planning and designs to address utility, stormwater, site access, recreation, and circulation systems needs for a wide range of communities including large cities. Our interdisciplinary teams blend creativity with low-impact approaches to address regulatory and climate-driven needs, delivering services across the following areas:

- MS4 and industrial stormwater permitting
- Modeling and design for urban, suburban, and rural environments
- Green infrastructure
- Streambank stabilization
- Stream restoration
- Best Management Practices
- Flood studies and modeling
- Grading and drainage design
- Erosion and sediment control

Let's reimagine our built environment together.

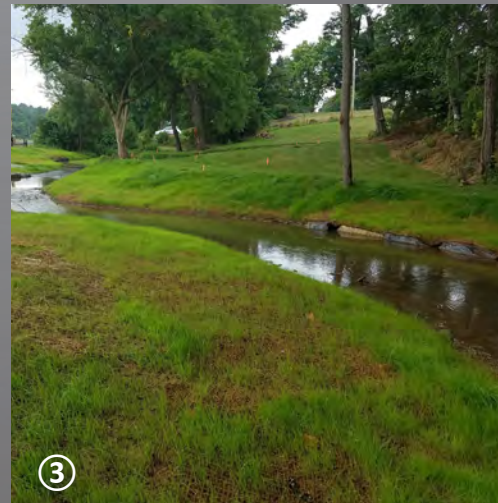




ENVIRONMENTAL SCIENCES

Our team of environmental scientists and engineers provide environmental compliance, remediation, and restoration services. BH has developed practical and cost-effective strategies to achieve environmental compliance restoring degraded habitats and creating lasting solutions for our built and natural environments. Our services include:

- Phase I and II Environmental Site Assessments
- Wetland delineation
- Brownfield/Act 2 closures investigations
- Site remediation
- Groundwater investigations
- Watershed assessment
- GIS mapping



Inset: 1401 Marina Boulevard Site Investigation, Atlantic City Sewerage Authority

1. Route 40 Wetlands and Waterway Investigation, NJDOT
2. Tier II Gas Sampling for Forty West Landfill, Washington County Division of Environmental Management
3. Little Antietam Creek and Grove Creek Stream Restoration, Washington County Soil Conservation District
4. Additional Environmental Investigations, Mays Landing Maintenance Facility, NJDOT
5. Hazardous Waste Remedial Investigation and Remediation Action, Sand Hill Maintenance Facility, NJDOT

Let's protect our water resources together.





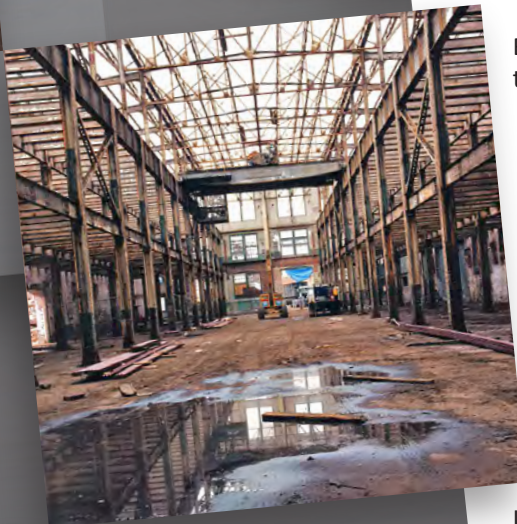
Transforming the old into the new – it's part of our legacy at BH. Our corporate headquarters, shown in the photos on the left, represents our capability to plan, design, and supervise the reconstruction of aging infrastructure. This complete rehabilitation effort is a testament to our commitment to delivering sustainable solutions.

Challenge our talented team of engineers and scientists with your next water resources project to help create a new future for your community.

CONTACT US

BH has 14 offices strategically located across the United States including:

- Pennsylvania
- Florida
- Louisiana
- Maryland
- Mississippi
- New Jersey
- Tennessee
- Virginia



Learn more about how BH can help with your next project by calling (800) 274-2224, or visit us online at www.bucharthorn.com.

