

Joshua E. Glace, PWS, CPESC
Associate Project Manager – Environmental Services

Education: Mansfield University, Bachelor of Science, Environmental Science (minor in Biology) 2011

Professional Certifications:

- Professional Wetland Scientist (2016 to Present) – PWS#2748
- Certified Professional in Erosion and Sediment Control (2014-Present) – #7970
- Act 38 Nutrient Management Commercial (2012-2019) – #1994-NMC
- Sewage Enforcement Officer (2017-2022) – SEO # 4001

Joshua has more than 13 years professional experience in environmental consulting, including 12 years with Larson Design Group. He performs permitting, environmental evaluations and assessments, and community engagement activities for clients throughout Pennsylvania, New York, Ohio, and West Virginia. He has completed hundreds of permits, including general, Section 401 and 404, NPDES, and nationwide permits, as well as Ohio Rapid Assessment Method (ORAM) and clearances for threatened and endangered species.

Joshua's expertise also includes wetland delineation, mitigation design and monitoring, stream assessment and design, flood mitigation and design, agricultural plan development, septic design and evaluation, soil classification and testing, erosion and sediment control design and inspection, stormwater design, habitat assessment, watershed assessment, water quality sampling, acid mine drainage treatment, and abandoned mine land reclamation. Examples of Josh's completed relevant projects are provided below.

- Environmental Assessments and Permitting
 - Led wetland delineation teams, stream delineations, and environmental assessments for projects of varying sizes across Pennsylvania, New York, West Virginia, and Ohio. Completed the associated documentation for the preparation of environmental permits.
- Environmental and Ecological Studies
 - Joshua's studies have included botanical surveys, threatened and endangered species surveys and clearance letters, macroinvertebrate studies and identification, watershed assessment, wetland mitigation site assessment, water budgets, invasive species studies, habitat assessments, and wetland monitoring. His experience includes coordination with multiple state and federal agencies on several studies including PADEP, PADCNR, PAFBC, PAGC, WVDNR, USACE, and USFWS.
- Quaker Run and Shamokin Creek Stream Improvements
 - Reconstruction of stream embankments along Quaker Run in the area of Ranshaw, Pennsylvania to improve the waterway from damage created as a result of hurricane impacts.
- Carbon Run Improvements
 - Structural embankment improvements to Carbon Run to protect sanitary main and maintain hillside just outside of the city of Shamokin, Pennsylvania. Improvements required HEC-RAS analysis to minimize floodway and floodplain impacts.
- West Branch Regional Authority New Wastewater Treatment Plant
 - LDG provided preliminary and final design as a member of a team for a new 2.4-MGD wastewater treatment plant and conveyance system.
- Weis Market Milton Distribution Center Environmental Permitting
 - LDG provided a full wetland delineation of Weis Market's Milton Distribution Center expansion project. The environmental work on the 74-acre project site included a full botanical survey on all wetland habitats, a full individual assessment of the spadefoot toad by a certified biologist, and the design of a 1.5-acre mitigation site. The project also included intensive environmental permitting and coordination among several regulatory agencies including PADEP, PADCNR, PAFBC, and USACE.
- Honniasont Tract 239 Pipeline Environmental Mitigation
 - This wetland and stream mitigation project was designed, implemented, and monitored at the Little Pine State Park. The design consisted of small wetland areas and stream bank stabilization and access to Little Pine Creek.

- Lake Carey Wastewater Treatment Project
 - LDG provided full-service engineering and environmental services for the Lake Carey Sewage Collection and Treatment System project. The project was the result of the Act 537 Plan Update Revision/Special Study conducted to address the communities' wastewater needs. The Lake Carey service area contains a total of 385 single-family residences/vacation homes and a few commercial properties. The plan called for the construction of a grinder pumps for each user, 85,000 linear feet of conveyance sewer mains, and a 0.120 MGD wastewater treatment plant.
- Marsh Road Reconstruction
 - This project was the reconstruction of a 1-mile roadway through a Pin Oak forested wetland. This required extensive environmental assessment and permitting which included a 6-acre wetland mitigation site design, fully botanical survey for three threatened and endangered species, spadefoot toad permitting and mitigation, and cultural resources.
- New Columbia Grain Mill
 - LDG provided engineering and environmental services for a new state-of-the-art grain mill being constructed by Todd & Sargent, a provider of custom solutions to the feed, grain, flour, specialty, and dry-bulk industrial sectors. The \$80 million project is being built on a 172-acre site and includes 75,000 square feet of industrial space and a 7,635-linear-foot rail siding to serve the facility.
- Sullivan County Stream Stabilization and Flood Mitigation Program
 - Josh is the program coordinator responsible for site assessment, design, permitting, and construction administration for properties that are threatened by streambank erosion and flooding issues within Sullivan County. This program is funded by the American Rescue Act Funds.
- Mansfield Borough Stormwater Assessment and Watershed Improvements
 - This was a study of stormwater and flooding issues associated with a buried culvert within Mansfield Borough. An assessment of the upstream watershed as well as a grant application was completed to reduce the increased runoff from entering the culvert and minimize the volume of stone and log debris that blocks the culvert and causes flooding.
- Newport Wastewater Treatment Plant Upgrade
 - Completed a full system design and upgrade which included community outreach and surveys to identify stormwater that was entering the sanitary sewer system.
- Carr Deer Farm Agricultural Planning
 - Completed agricultural planning and bmp design for a whitetail deer farm that is located entirely within a wooded pasture system.

In 2017, Joshua was appointed Program Manager for the Agricultural Planning Reimbursement Program in support of Pennsylvania's Phase 3 Watershed Implementation Plan (WIP). Over the course of four years, the program supported over \$2 million in agricultural planning throughout six counties in the Chesapeake Bay watershed. Implemented plans include manure management plans, agricultural erosion and sediment control plans, 590 plans, and conservation plans. The Phase 3 WIP incorporates the views and expertise of hundreds of Pennsylvanians who are government, agricultural, industry, business, community, and academic leaders and residents in the watershed. As Program Manager, Joshua met with these local stakeholders to assure implementation and execution of Pennsylvania's nutrient and sediment reductions. As a result of the meetings, the Countywide Action Plan (CAP) was developed, and in 2021 Joshua became a CAP coordinator for seven Pennsylvania counties in the upper Chesapeake Bay Watershed. In its first year, Joshua secured over \$4 million in funding across both state and federal funding sources to directly implement the CAP process.

Joshua, along with his team, are responsible for introducing the Phase 3 WIP to alternative sources of nutrients, such as fish hatcheries. He also brought attention the need to address abandoned mine land (AML) and acid mine drainage (AMD) through the CAP process.

Joshua continues to develop partnerships across counties in the Pennsylvania upper Chesapeake watershed and has become their trusted advisor. He provides technical support in the CAP process and guides implementation of Agricultural Conservation Assistance Program funding totaling over \$8 million.

Prior to working for Larson Design Group, Joshua worked as a Physical Science Aid for the USDA Agricultural Research Service (ARS) at the Klingerstown, Pennsylvania field office. This location is well

known for nutrient transport research on a three-square mile watershed and for the FD-36 test location which has been fundamental in collecting data on phosphorus transport in agricultural watersheds. Joshua assisted in the implementation, monitoring, and maintenance of 12 test locations within this small watershed, providing important information on the impacts small watersheds have on the Chesapeake Bay. He also assisted in numerous agricultural and hydrologic monitoring activities at The Pennsylvania State University's Kepler Hydrologic Monitoring Site located in Rock Springs, Pennsylvania.

Joshua also worked with Trout Unlimited on their 25-year assessment on the West Branch of the Susquehanna River. Joshua completed the index of biological integrity (IBI) on water quality data and macroinvertebrates samples collected across tributaries directly discharging into the West Branch to determine the overall improvement of the river system. Findings were compiled and presented at the 2009 West Branch Coalition Symposium.

On a personal level, Joshua grew up in lower Northumberland County on the banks of the Susquehanna River where he spent most of his free time hunting, fishing, and kayaking. Joshua is volunteer for youth environmental programs sponsored by conservation districts throughout Northumberland, Juniata, and Snyder counties. He also contributes to his family's orchard farm and completes habitat management projects on his forested properties in Pennsylvania and New York