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Header 1

List View

- General Information**
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- Clarification Request

Procurement Folder: 1834025

Procurement Type: Central Contract - Fixed Amt

Vendor ID:

Legal Name: ENVIROSCIENCE INC

Alias/DBA:

Total Bid: \$0.00

Response Date:

Response Time:

Responded By User ID:

First Name:

Last Name:

Email:

Phone:

SO Doc Code: CEOI

SO Dept: 0310

SO Doc ID: DNR2600000003

Published Date: 11/10/25

Close Date: 12/3/25

Close Time: 13:30

Status: Closed

Solicitation Description:

Total of Header Attachments: 1

Total of All Attachments: 1



Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder: 1834025
Solicitation Description: A&E - Meadow River WMA Wetlands Project
Proc Type: Central Contract - Fixed Amt

Solicitation Closes	Solicitation Response	Version
2025-12-03 13:30	SR 0310 ESR12022500000003342	1

VENDOR
000000176834
ENVIROSCIENCE INC

Solicitation Number: CEOI 0310 DNR2600000003
Total Bid: 0
Response Date: 2025-12-03
Response Time: 11:47:39
Comments:

FOR INFORMATION CONTACT THE BUYER
Joseph (Josh) E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor Signature X	FEIN#	DATE
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All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Civil engineering				0.00

Comm Code	Manufacturer	Specification	Model #
81101500			

Commodity Line Comments:

Extended Description:

Design and Contract Administration of a new wetlands area at Meadow River Wildlife Management Area.



Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Expression of Interest
Architect/Engr

Proc Folder: 1834025			Reason for Modification:
Doc Description: A&E - Meadow River WMA Wetlands Project			
Proc Type: Central Contract - Fixed Amt			
Date Issued	Solicitation Closes	Solicitation No	Version
2025-11-10	2025-12-03 13:30	CEOI 0310 DNR2600000003	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:

Vendor Name : ENVIROSCIENCE, INC.

Address : 5070

Street : Stow Road

City : Stow

State : Ohio **Country :** USA **Zip :** 44224

Principal Contact : Greg Zimmerman, Vice President

Vendor Contact Phone: 800-940-4025 **Extension:**

FOR INFORMATION CONTACT THE BUYER

Joseph (Josh) E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor
Signature X

FEIN# 34-1603505

DATE 12/2/2025

All offers subject to all terms and conditions contained in this solicitation

December 3, 2025

Mr. Josh Hager III
2019 Washington Street East
Charleston, WV 25305-0131

Re: Expression of Interest – West Virginia DNR – Meadow River WMA Wetlands

Dear Mr. Hager:

EnviroScience, Inc. is pleased to submit this Expression of Interest for the Meadow River Wildlife Management Area Seasonal Wetland Development Project. With a company-wide emphasis on ecological restoration, wetland science, and water resource management, EnviroScience is well suited to support the Division of Natural Resources in designing and implementing functional seasonal wetlands that enhance habitat for waterfowl and other wildlife.

Since 1989, EnviroScience has been a nationally recognized leader in the natural resources field. Our staff of more than 150 scientists, engineers, and technical specialists regularly support state agencies, conservation organizations, and federal partners with wetland creation, hydrologic assessment, habitat restoration, permitting, and construction-phase oversight. Our interdisciplinary team integrates ecological, hydrologic, and engineering expertise under one roof, allowing us to deliver efficient, cost-effective, and ecologically sound project solutions.

EnviroScience's strengths align directly with the objectives of this project: evaluating site conditions and feasibility, designing and permitting wetland features, and developing construction-ready plans that minimize disturbance while maximizing ecological benefit. Our proposed team brings extensive experience in wetland creation, hydrology-driven habitat design, and regulatory coordination. We are committed to delivering a practical, high-quality design and supporting successful implementation during construction.

We appreciate the opportunity to be considered for this important habitat development project and welcome any questions regarding the information provided in our EOI. Should you have any questions or require additional information, please do not hesitate to contact me at (330) 858-0298 or by email at jbingham@enviroscienceinc.com.

Sincerely,



Julie Bingham
Director of Restoration

Attachment: EnviroScience Expression Letter of Interest



1.0 FIRM OVERVIEW

EnviroScience, Inc. is a nationally recognized ecological restoration and environmental consulting firm with more than 150 professional scientists, engineers, and technical specialists. As a fully licensed engineering and design firm, EnviroScience specializes in developing high-functioning wetland and aquatic systems that support waterfowl and wildlife, making the firm particularly well-suited for seasonal wetland development projects such as the Meadow River WMA effort.

EnviroScience's restoration philosophy is creating a foundation for recovery and is grounded in an integrated understanding of wetland hydrology, soils, vegetation, and habitat structure. The firm employs advanced expertise in surface and groundwater interactions, seasonal inundation dynamics, and wetland habitat design to create resilient systems that meet ecological objectives. This includes the support of a PhD-level wetland ecologist whose research focuses specifically on waterfowl habitat restoration in waterfowl management areas.

The Ecological Restoration Department provides a comprehensive suite of services essential for wetland development and enhancement, including hydrologic and hydraulic assessments, geomorphic analysis, habitat evaluation, design and permitting, construction contract document preparation, and construction-phase administration. EnviroScience's practitioners routinely deliver wetland creation and enhancement projects aimed at improving habitat for migratory birds and other wetland-dependent species. Their team emphasizes constructible, data-driven designs and maintains close involvement during construction to ensure the ecological intent is faithfully implemented while minimizing disturbance and project cost.






EnviroScience's "one-roof" approach integrates scientific assessment, engineering design, permitting expertise, construction oversight, and long-term monitoring. This model promotes streamlined coordination, consistent technical quality, and predictable project outcomes.

In addition to ecological restoration, EnviroScience offers a broad range of complementary environmental services — including regulatory compliance support, marine and dive operations, environmental inspections, a full analytical laboratory, and natural resource consulting. This breadth of expertise allows EnviroScience to support clients comprehensively across project stages and disciplines, ensuring efficient delivery and high-quality results.

EnviroScience is headquartered in Stow, Ohio, with additional offices in Akron, Ohio; Asheville, North Carolina; Richmond, Virginia; Nashville, Tennessee; State College, Pennsylvania; and Fort Lauderdale, Florida.



ENVIROSCIENCE KEY SERVICES

 <p>Restoration Services</p>	<ul style="list-style-type: none"> • Stream, Wetland, and Prairie Restoration • Morphologic Assessment • Watershed Stability Assessment • Hydraulic Modeling • Conceptual Restoration • Mitigation Plan Development 	<ul style="list-style-type: none"> • Invasive Species Control • Grant Writing • Real Estate • Sewer/Pipe Inspection • Underwater Archeology • Drone Work
 <p>Compliance Services</p>	<ul style="list-style-type: none"> • NPDES Permitting • SPCC Plans • Environmental Auditing • NEPA Env./Planning • Phase I & II • Plant Closures • Green Infrastructure • Municipal Engineering 	<ul style="list-style-type: none"> • Stormwater Compliance • MS4 Permits • Emergency Response • NRDA • Water Quality Monitoring • Analytical Sampling • Environmental Inspection • Air Quality Analysis • Vibracore Sediment Sampling
 <p>Natural Resource Services</p>	<ul style="list-style-type: none"> • Wetland and Stream Delineation • Permitting/Coordination • Amphibians/Reptiles • Bat Survey • Fisheries • Mammals • Birds 	<ul style="list-style-type: none"> • Macroinvertebrates/Crayfish • GIS • Habitat/Vegetation • Ecological Risk Assessment • Biological Assessments and Opinion Coordination • ESA
 <p>Marine Services</p>	<ul style="list-style-type: none"> • Mussel Surveys • Bathymetric/Mapping • Commercial Diving • Air Lifting • Jetting 	<ul style="list-style-type: none"> • Underwater Inspection • Salvage • Contamination Diving • Welding • ROV
 <p>Laboratory Services</p>	<ul style="list-style-type: none"> • Whole Effluent Toxicity Testing • TIE / TRE • Water Effects Ratio • Biotic Ligand Modeling • Sediment Toxicity • Acute / Chronic 	<ul style="list-style-type: none"> • Algae / Diatom ID • Periphyton ID • Harmful Algal Bloom Testing • Algal Toxin Testing • PCR Analysis for Cyanobacteria • Product Testing



2.0 UNDERSTANDING OF PREOJECT

Our understanding of this project is to establish a functional seasonal wetland complex on the Meadow River Wildlife Management Area to enhance habitat for waterfowl and other wetland-dependent species. Creating a reliable seasonal wetland requires careful attention to site-specific hydrology, including topography, soil conditions, drainage patterns, and surface water retention. Properly designed water control features such as low berms, channels, and adjustable structures are critical for managing timing, depth, and duration of inundation to support foraging, nesting, brood-rearing, and migratory use by waterfowl and other wildlife.

Meadow River WMA is an ecologically valuable and sensitive landscape, and any design or construction activity must minimize disturbance to existing habitats, maintain water quality, and avoid unnecessary impacts to surrounding wetlands and uplands. A successful project will balance ecological uplift with practical constructability, using a light-touch approach wherever feasible.

EnviroScience understands that project constraints include working within a defined budget, navigating state and federal permitting requirements, coordinating with regulatory agencies, and ensuring that the final design complies with applicable laws and codes. Ecological considerations such as habitat function, hydrologic regimes, sediment management, and invasive species prevention must be integrated into all phases of planning and design. This project requires a comprehensive yet cost-effective solution that achieves the Division of Natural Resources' objectives while ensuring long-term habitat sustainability.

3.0 GOAL/OBJECTIVE 1 – SITE REVIEW, FEASIBILITY AND COMMUNICATION

EnviroScience will begin the project with a comprehensive evaluation of existing site conditions to establish a clear understanding of the hydrologic, ecological, and physical factors that influence the feasibility of creating seasonal wetlands at Meadow River WMA. Our team will conduct targeted site visits and field assessments to document topography, soils, vegetation, drainage patterns, and current habitat functions. Our team has numerous drone applications but one in particular with LiDAR capabilities which can generate a highly accurate digital elevation model for precise planning. These data will be supplemented with desktop analyses of available mapping, aerial imagery, and hydrologic records to develop an accurate picture of the site's opportunities and constraints.

As wetland restoration specialists, we will evaluate hydrology and soils with particular attention to water retention potential, floodplain dynamics, and seasonal inundation requirements for waterfowl habitat. For example ensuring that hydrology is sufficient to provide both diverse food sources as well as depth of water for suitable habitat during ideal timeframes. Our engineers and biologists work collaboratively to assess constructability, considering access routes, disturbance limits, water management needs, and the practicality of implementing various design options. This combined expertise allows us to identify approaches that achieve ecological goals while minimizing impacts, construction effort, and overall cost.

Effective communication with the Division of Natural Resources will be central to our approach. EnviroScience will maintain an open, consistent dialogue through scheduled progress meetings, field reviews, written updates, and shared project documents. This collaborative process ensures

that the project direction aligns closely with the owner's objectives and that decisions are made transparently and efficiently.

The outcome of this phase will be a clear, implementable plan that reflects ecological best practices, regulatory considerations, and the budgetary parameters of the project. By pairing rigorous technical assessment with practical restoration experience, EnviroScience will develop a feasible strategy that supports the successful creation of high-quality wetland habitat tailored to Meadow River WMA.

4.0 GOAL/OBJECTIVE 2 – DESIGN AND PERMITTING SERVICES

EnviroScience will develop a comprehensive and cost-conscious design for the seasonal wetland system that reflects the Division of Natural Resources' goals, current regulatory requirements, and the ecological conditions identified during site review. Our design process integrates wetland hydrology, habitat functionality for waterfowl and other wildlife, and practical constructability considerations. Using data gathered during field assessments, our engineers and scientists will prepare conceptual through final design plans that include grading, water control structures, drainage modifications, planting plans, and habitat enhancement elements tailored to the site.

We will coordinate closely with regulatory agencies to identify required state and federal permits and ensure compliance with applicable laws, codes, and natural resource protection standards. Our staff have extensive experience securing permits for wetland creation, hydrologic modifications, and habitat restoration projects, allowing us to streamline submissions and anticipate regulatory needs early in the process. We have conducted several permitting-specific projects in West Virginia and are experienced in working with the appropriate State and Federal agencies.

Throughout design development, EnviroScience will maintain consistent communication with the Division, reviewing alternatives, cost implications, and ecological outcomes to ensure the selected plan meets the project's functional and fiscal objectives. Deliverables will include detailed design documents, specifications, and supporting analyses that clearly guide construction while maintaining flexibility for field adjustments when appropriate.

5.0 GOAL/OBJECTIVE 3 – CONSTRUCTION CONTRACT DOCUMENTS AND ADMINISTRATION SERVICES

EnviroScience will prepare clear and complete Construction Contract Documents that translate the ecological and engineering design intent into practical instructions for contractors. These documents will include construction drawings, technical specifications, bid requirements, and project sequencing recommendations that support accurate pricing, protect natural resources, and ensure quality implementation.

During construction, EnviroScience will provide administration services delivered by experienced engineers, biologists, and construction-seasoned staff who understand the nuances of wetland restoration and water control systems. Our team will review contractor submittals, respond to Requests for Information (RFIs), participate in preconstruction and progress meetings, and provide site observations to confirm compliance with the design and permit conditions. We emphasize proactive communication and rapid issue resolution to maintain project momentum and reduce the risk of delays.

EnviroScience's restoration personnel frequently work alongside heavy equipment operators during wetland construction, helping guide earthwork and structure placement to ensure ecological functions are achieved as intended. This hands-on, collaborative approach allows us to make informed field adjustments, protect sensitive areas, and maintain alignment with habitat goals throughout construction.

Our construction administration support continues through project closeout, including inspections, punch-list development, as-built review, and verification that the wetland system functions as designed. This comprehensive oversight ensures a successful transition from design to implementation and supports the long-term viability of the seasonal wetland habitat at Meadow River WMA.

6.0 QUALIFICATIONS, EXPERIENCE & PAST PERFORMANCE

EnviroScience offers a highly qualified, interdisciplinary team with extensive experience in wetland creation, hydrologic assessment, habitat restoration, and construction-phase ecological oversight. Our staff includes licensed engineers, biologists, environmental scientists, and certified wetland specialists who collectively bring decades of experience designing and implementing restoration projects for state agencies, federal partners, and conservation organizations. EnviroScience consistently delivers solutions that are scientifically rigorous, practical to construct, and aligned with ecological and regulatory objectives. The following subsections outline our project team, relevant experience, and past performance on similar wetland and habitat enhancement projects.

6.1 Key Staff Qualifications

Below are qualifications of key project staff. Full resumes are available upon request.



Julie Bingham, CERP, is the Restoration Practice Area Director at EnviroScience, where she uses her 27 years of experience to manage a multidisciplinary team of staff, develop, manage, and oversee work throughout the practice area. She has been responsible for the design and implementation of over 165 restoration projects throughout the region. She is also regularly involved with education and instructional lectures regarding restoration and morphology for Igniting Learning Streams (10 years) and Cleveland Metroparks volunteer learning initiatives. Her background in biology, morphological assessment, restoration, design, and implementation experience makes her a unique leader. Julie has completed Rosgen Applied Fluvial Morphology through Level IV and is certified by OEPA as a Level 3 Qualified Data Collector for fish sampling and QHEI. She is intimately involved with each stage of restoration projects, including the actual construction implementation, where her experience in heavy equipment operation and oversight makes the restoration design a reality.

Education: MS Biology, The University of Akron
BS Biology, Hiram College

Training: Certified Ecological Restoration Practitioner (CERP), Rosgen Applied Fluvial Geomorphology Levels I, II, III & IV, OEPA Qualified Data Collector QHEI Level 3, OEPA Qualified Data Collector Fish Evaluation Level 3, OEPA Primary Headwater Habitat Assessment (PHWH), OEPA ORAM Version 5.0



Emily Tarsa, PhD, is a Restoration Ecologist and Senior Project Manager with EnviroScience, specializing in wetland ecology, wetland creation, and ecological restoration. She has over ten years of experience conducting wetland delineations, hydrologic and vegetation assessments, Clean Water Act permitting, and restoration planning across the Intermountain West and eastern U.S. Her doctoral research focused on hydrologic and wetland plant community dynamics in waterfowl management areas of the Intermountain West, examining restoration techniques to improve wildlife improvement and wetland function in wetland systems. Dr. Tarsa has led wetland restoration designs, mitigation evaluations, floodplain reconnection efforts, and revegetation plans for state agencies, municipalities, and nonprofit partners. Her background in wetland plant ecology, habitat restoration, and regulatory coordination makes her well-qualified to support the design, permitting, and implementation of seasonal wetland habitat at Meadow River WMA.

Education: PhD Ecology, Utah State
BS Environmental Science, SUNY–Environmental Science and Forestry

Training: Stream Morphology Assessment (NCSU, 2024); Design Principles for Wetland Restoration and Construction (Wetland Restoration & Training LLC, 2013), Stream Bank Repair (NCSU, 2024), Hydric Soils Training Certification (NAWM, 2022); Advanced Wetland Plant Identification (USU, 2021)



Angelina Hotz, PE, is a registered engineer in Ohio, Tennessee and West Virginia and part of EnviroScience's Restoration team, where she is the Operations Manager for design, engineering, and plan development of restoration projects. Since 2017, she has been the manager and lead engineer on numerous restoration projects, in both a design-build and design-bid capacity. With over 12 years of consulting experience, Angelina is versed in site civil design and grading, stormwater management plan development, MS4 compliance, hydrologic and hydraulic modeling, cost estimating, and project management. She is an advocate for implementing green infrastructure and sustainable designs in restoration and stormwater projects.

Education: BS Civil Engineering, The University of Dayton

Training: Registered Professional Engineer: Ohio, West Virginia, Tennessee, New York; Rosgen Applied Fluvial Geomorphology Level I, ENV SP, Institute for Sustainable Infrastructure (ISI) Envision Sustainability Professional, ESI Program Management Training






Broc McCroskey, has been with EnviroScience, Inc. since 2024 and currently serves as Water Resources Engineer for the Company. In his current role he provides design and technical support for environmental projects of all sizes. His diverse background has provided him with experience related to surface water, public utilities, land development, permitting, spatial analysis, and all things related. Broc's ability to quickly digest information and utilize a variety of perspectives in his design makes him an integral part of the EnviroScience team.

Education: BS Engineering, Robert Morris University

Training: Engineer in Training



Jeff Niehaus has been with EnviroScience since 2006 and is a skilled field biologist specializing in aquatic ecology and stream restoration, as well as land surveying technology and Unmanned Aerial Systems. His expertise in fish biology, ecology, and habitat requirements is applied to stream and wetland design, and lake management. Jeff is an integral figure in the development and construction of EnviroScience's stream and wetland restoration projects. His duties include stream characterization and morphology surveys, data analysis, design implementation, and construction

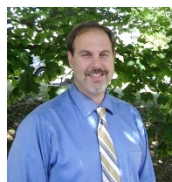
	<p>oversight. He is an experienced fisheries sampling specialist, as well as a fish, ichthyoplankton, and plankton taxonomist. He has worked as a consultant on numerous fisheries management projects throughout the country, implementing sampling designs and techniques. He is a certified FAA sUAS pilot and is the lead LiDAR, photogrammetry and drone photography specialist at EnviroScience.</p> <p>Education: BS Biology, The Ohio State University AS Biological Sciences, Columbus State Community College</p> <p>Training: Rosgen Applied Fluvial Geomorphology Levels I, II, & III, OEPA Level 2 Qualified Data Collector QHEI and for Aquatic Macroinvertebrate Collection and Identification, OEPA Primary Headwater Habitat Assessment (PHWH)</p>
	<p>Tom Prewitt, CERP, CWB® is a Restoration Biologist at EnviroScience, where he uses his extensive experience to manage and oversee a wide variety of projects. His experience in biology, habitat management, construction, restoration, design, and implementation make him a valuable team member. Tom is a Certified Ecological Restoration Practitioner and Certified Wildlife Biologist using an ecosystem approach when implementing management and restoration projects. He has been integral in all aspects of restoration from design, permitting, implementation, reporting, and monitoring.</p> <p>Education: MNR Natural Resources, University of Idaho Restoration Ecology Certificate, University of Idaho BS Wildlife Resources, University of Idaho</p> <p>Training: Certified Ecological Restoration Practitioner (CERP), Certified Wildlife Biologist (CWB®), Rosgen Applied Fluvial Geomorphology Levels I, II, & III, Headwater Habitat Evaluation Index (HHEI), ACOE Wetland Delineator Certification Program</p>
	<p>Michael Marefka has been with EnviroScience, Inc. for 3 years, and is an Ohio Department of Agriculture Certified Commercial Applicator in the Categories of 3A – General Aquatic Pest Control, 4A – Forest Pest Control, 5 – Industrial Vegetation Control, and Commercial CORE. He provides project management and technical expertise for the vegetation components of environmental restoration projects, including the identification and control of invasive species, identification of Ohio Department of Natural Resources State Listed Plant Species, native vegetation identification and installation, GIS services, as well as specialized consultation for the conservation of sensitive natural areas. The diverse nature of his work demands proficiency with issues related to ecosystem identification, herbicide application, and spatial analysis. Michael's ability to craft treatment methodologies that best reflect the challenges of unique ecosystems, while operating in a safe, efficient, and cost-effective manner, makes him an integral part of the EnviroScience team. He holds an M.A. in Environmental Studies from Cleveland State University and comes to EnviroScience from the Cleveland Museum of Natural History Natural Areas Division.</p> <p>Education: MA Environmental Studies, Cleveland State University BA Political Science, Kent State University</p> <p>Training: Ohio Department of Agriculture Commercial Applicator – 3A, 4A, 5, CORE</p>
	<p>Thad Gregory is a Designer with 16 years of experience specializing in corridor design, site grading, heavy underground construction design, environmental engineering projects, subsurface utility exploration, and geotechnical reports. Thad manages all aspects of CAD plan development. He converts conceptual designs into working models within Civil 3D, guides staff, performs quantity analysis and creates finished bid documents</p> <p>Education: BA Fine Arts, University of Akron</p>



Emma Kennedy, PWS, has extensive experience in conducting wetland assessments and delineations, stream habitat evaluations, and endangered species habitat assessments. She manages a large volume of projects for utility line surveys, engineering and building firms, conservation districts, and private property owners. She prepares ecological reports and permit applications, including those for 404 Nationwide Permits, 401 Water Quality Certification, and Ohio EPA NPDES. Additionally, she prepares supporting coordination documents and communicates with associated agencies including United States Fish and Wildlife Service, Ohio Department of Natural Resources, county, and local government. Her experience also includes NEPA compliance and Master Planning.

Education: MS Aquatic Ecology, Kent State University
BS Environmental Studies, Hiram College

Training: Professional Wetland Scientist, 38h Army Corps of Engineers Wetland Delineation Training, Headwater Habitat Evaluation Index, Ohio Rapid Assessment Method, Wetland Biocriteria Training: Sampling and Data Analysis for Floral & AmphIBI



Dr. Michael Liptak, PhD, Senior Ecologist with over 30 years of experience in wetland ecology, wetland restoration, and mitigation wetland design. He holds a Ph.D. in Environmental Science from The Ohio State University, where his doctoral research focused on created wetlands at the Olentangy River Wetland Research Park under renowned wetland ecologist Dr. William Mitsch. At EnviroScience, Dr. Liptak leads wetland mitigation planning, wetland assessments and delineations, technical report preparation, and permitting for projects of varying scales. His experience includes managing restoration and mitigation designs, conducting terrestrial, aquatic, and wetland surveys, and supporting complex ecological evaluations for agencies such as ODOT, USEPA, NASA, and the National Park Service. A Certified Senior Ecologist through the Ecological Society of America, Dr. Liptak brings deep technical expertise in wetland plant communities, hydrology-driven habitat design, and restoration planning, contributing valuable senior-level ecological insight to seasonal wetland development and wildlife-focused habitat projects.

Education: Ph.D. Environmental Science, The Ohio State University
BS Biology, The University of Toledo

Training: USACE Wetland Delineator Certification Training; HAZWOPER 40-hour and 8-hour Refresher; Biocriteria & QHEI; Identification of Grasses, Rushes, and Sedges; Forested Wetland Restoration (Wetlands Training Institute); Planning Hydrology for Constructed Wetlands; Fundamentals of Traffic Noise; FHWA Traffic Noise Model (1.0b & 1.1); PENNDOT Project-Level Highway Traffic Noise Handbook Training; FHWA Fundamentals and Abatement of Highway Traffic Noise; Certified Senior Ecologist (Ecological Society of America)



Michael Naymik, CPSS, is a Senior Wetland Scientist and Soil Scientist with over eight years of experience in environmental compliance, natural resources, and permitting. He brings a strong multidisciplinary background in hydric soil identification, soil science, wetland ecology, and geology, and has delineated thousands of acres of wetlands across the Midwest, South, and Eastern United States. At EnviroScience, Michael manages and conducts wetland delineations, develops permitting strategies, and coordinates with regulatory agencies in multiple states, including Ohio, Texas, Pennsylvania, and South Carolina. His work includes atypical wetland delineations, hydroperiod modeling for wetland mitigation sites, large-scale wetland assessments, and ecological survey management for transportation and infrastructure projects. Michael's expertise in soil physics, hydrology, and wetland identification combined with his experience managing complex, multi-site portfolios on accelerated timelines

	adds significant technical strength to wetland feasibility assessment, permitting, and design support for the Meadow River WMA project.
	Education: Wetland and Water Resource Management Graduate Certificate, Soil and Water Sciences, University of Florida BA Biology, University of Akron
	Training: Hydric Soil Identification (University of Florida); 38-hour Wetland Delineation Training; 20-hour Wetland Permitting Training (Chinn Environmental); ODOT NEPA Training – Managing the Environmental & Project Development Process; ODOT Purpose and Need Training; ODOT PDP Training; ODOT Section 4(f) Training; ODOT Categorical Exclusion Training; ODOT Waterway Permit Training; ODOT Ecological Training; ODOT Public Involvement Training; ODOT Section 106/National Register Eligibility Training; ODOT Regulated Material Review Training

6.2 Proposed Staffing Plan

EnviroScience has identified key project leads responsible for the primary technical, ecological, and engineering components of the project. These leaders are supported by a broad team of restoration ecologists, engineers, and field staff across multiple offices to ensure full project coverage and timely delivery.

Project Manager & Wetland Technical Expertise – Dr. Emily Tarsa

Dr. Emily Tarsa will serve as Project Manager and primary wetland technical lead for this project. She will oversee day-to-day coordination, schedule and budget management, communication with the Division of Natural Resources, and integration of ecological objectives into all design phases. Dr. Tarsa will lead the wetland habitat evaluations, hydrologic and vegetation assessments, and development of restoration strategies that support seasonal waterfowl habitat. Her experience with wetland creation, hydrology-driven habitat design, and permitting ensures strong technical leadership from project initiation through construction oversight.

Overall Restoration Technical Guidance – Julie Bingham, Director of Restoration Services

Julie Bingham will provide senior-level technical guidance, quality assurance, and oversight throughout the project. In her role as Director of Restoration Services, she will ensure that design decisions, restoration approaches, and construction recommendations align with industry standards and EnviroScience's best practices. Julie will support interdisciplinary coordination and serve as a resource for resolving complex technical challenges related to hydrology, habitat design, and restoration constructability.

Site Assessment Lead – Jeff Neihaus

Jeff Neihaus will lead field-based site assessments including wetland and stream delineations, hydrologic observations, soil evaluations, and habitat condition documentation. He will coordinate data collection efforts and work closely with Dr. Tarsa and the engineering team to translate field findings into a practical and ecologically sound site design. Jeff's experience identifying site constraints and opportunities will help ensure accurate understanding of field conditions and minimize disturbance during construction.

Engineering Design Lead (WV-Registered Engineer) – Angelina Hotz, P.E.

Angelina Hotz will serve as the engineering design lead and will be responsible for hydrologic and hydraulic analyses, grading design, development of water control features, and preparation of Construction Contract Documents. As a West Virginia-registered engineer, she will oversee engineering compliance with state standards, permitting requirements, and applicable design

criteria. Angelina will collaborate closely with the ecological team to develop an integrated, constructible design that meets project objectives and budget constraints.

Construction Oversight Lead – Tom Prewitt

Tom Prewitt will provide construction-phase oversight, ensuring the project is built in accordance with the approved plans, specifications, and ecological intent. His role will include participation in contractor meetings, review of submittals and RFIs, on-site observation during key construction activities, and guidance to ensure water control structures, grading, and habitat features are installed correctly. Tom's hands-on experience with restoration construction allows him to identify issues early and support field adjustments that protect ecological integrity while maintaining project efficiency.

6.3 Relevant Project Experience

EnviroScience has extensive experience in wetland creation in the design-bid, design-build, and design-bid-build capacities. Below we outline our relevant wetland restoration experience providing four project highlights and a table of additional projects to show the full scope of our wetland restoration experience. The majority of our projects include initial site assessment (including wetland delineation), restoration design and engineering, permitting and coordination with various agencies, planting, invasive vegetation management, and construction administration and oversight.



A constructed wetland pool at the Valley View restoration project site showing installed snags and log pile habitat.



Adams Run Stream & Wetland Mitigation: Constructed depressional wetland at 2-years post-restoration.



Mud Lake Mitigation Bank: Wetland established in former agricultural field at 1-year post-restoration.



Madison Village Wetland Restoration: Restored permanent pool backwater wetland at 2-year post-restoration.

Project Highlight No. 1

Jackson Livesay Wetland Restoration (Total Project Area: 30 acres) Franklin Township, Jackson County, Ohio



Aerial photo of wetland construction during active earthwork.

EnviroScience completed this H2Ohio-funded design-build wetland restoration project in September 2025 for the Ohio Valley Conservation Coalition. The goals of the project were to connect the floodplain and improve habitat by converting the former agricultural lands to wetlands within flood prone areas of Salt Lick Creek and Fourmile Creek and to restore at least 8 acres of wetland. EnviroScience completed all aspects of the project including the earth moving and planting.

Extensive data collection of the existing wetlands and topographic elevations provided the basis for restoration design, modeling, and permitting. To restore natural hydrology and connect the streams to the floodplain, the existing berms along Salt Lick and Fourmile Creek were removed. A total of 8.7 acres of depressional wetlands were created with mounded microtopography and shallow depressions to create a diverse topographic landscape for wetland recovery. A total of 4,835 CY was moved out of the floodplain to an upland spoil area. Woody habitats were installed throughout the wetlands sourced from material on-site and gained as part of the berm removal. Existing trees were saved and incorporated into the grading for faster recovery. The entire 30-acre project area was revegetated and managed for invasive vegetation. Wetland and upland areas were seeded with custom native mixes and native plantings included 225 containerized trees and shrubs and 1,000 live stakes. Locally harvested tree seed was also installed into the wetland.

Client
Ohio Valley Conservation Coalition

Key Services Provided

- Wetland Restoration
- Site Evaluation & Wetland Delineation
- Engineering & Design
- Permitting & Agency Coordination
- Construction Administration & Implementation
- Native Seeding & Planting
- Invasive Vegetation Management

Project Duration
April 2024-September 2025

Total Project Cost
\$470,000

Key Staff
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Project Highlight No. 2

Hondros Wetland Mitigation (Total Project Area: 100 acres) Sunbury, Delaware County, Ohio



Aerial photo early spring following earthwork.

EnviroScience developed The Hondros Ohio Agricultural Mitigation Bank in conjunction with the USDA Natural Resources Conservation Service and Hondros Property Management. The purpose of the project was to generate wetland mitigation credits on a 100-acre property which had been historically used for agricultural purposes in Delaware County, Ohio. EnviroScience developed the mitigation bank prospectus leading to bank approval. Design of the legacy agricultural field conversion began with extensive data collection of the soils, existing wetlands, and topography. A LiDAR drone was used to collect detailed elevations.

Construction of the bank included locating and incapacitating tile drainage lines and strategic grading to expand wetland areas and recreate a microtopographic mosaic suitable for a forested wetland system. Within the 31.1 acres of created wetland, 13.2 acres of wetland depressions were constructed to increase water retention and provide hydrological diversity within the wetland system. Wetlands were designed and constructed with the goal of providing habitat to support waterfowl and wetland biota.

Following the completion of construction activities, native vegetation was installed across the 100-acre-project area, including 5,060 bare root plants, 5,240 live stakes, and a combination of native upland meadow and wetland seed mixes.

EnviroScience is contracted to continue monitoring the site and will begin phase 2 in 2026 that includes stream mitigation. NRCS funded the project for the design-bid component for wetland and stream mitigation.

Client

Hondros Property Management & Natural Resources Conservation Service (NRCS)

Key Services Provided

- Wetland Restoration
- Wetland Mitigation
- Bank Development
- Forested Wetland Restoration
- Site Evaluation & Wetland Delineation
- Restoration Engineering & Design
- Permitting & Agency Coordination
- Construction Administration & Oversight
- Native Seeding & Planting
- Invasive Vegetation Management

Project Duration

2021-2025

Total Project Cost

\$500,000

Key Staff

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Project Highlight No. 3

Nesbitt Forested Wetland & Stream Restoration

(Total Project Area: 28.9 acres), Peninsula, Summit County, Ohio



Wetland and stream restoration within Cuyahoga Valley National Park.

EnviroScience and its teaming partner restored 15 acres of forested wetlands and over 900 linear feet of intermittent stream on former agricultural land in Cuyahoga Valley National Park (CVNP) as mitigation for impacts to wetlands and streams for the City of Hudson Salt Storage Facility and School Bus Garage project. The primary goal was to restore and enhance wetlands, upland forests, and streams on the site to ensure it is not an impaired inholding property within CVNP boundaries.

Construction methods included breaking field tiles, creating a compacted core trench to intercept groundwater, grading to increase hydraulic retention time, controlling water flow path through meandering outlet design and recreating microtopography lost through agricultural practices. The design also include a stream restoration component by enhancing an existing degraded stream channel with installing proper riffle-pool morphology to arrest head cuts and channel incision within the stream. Additionally, extensive reforestation and revegetation were performed along with invasive species management.

Several priorities of the National Park Service were accomplished, including the restoration of formerly impaired properties, restoration and addition of wetland acreage for habitat and water quality filtration, and restoration of streams, all within Park boundaries to improve aquatic habitat and water quality entering the Cuyahoga River. Post-construction, EnviroScience is conducting vegetation, groundwater, and restoration inspection and wetland delineation monitoring with photo documentation for 10 years. CVNP has numerous habitat impairment issues throughout the Park, and this project serves as a model for future high-quality restoration activities.

Client

City of Hudson

Key Services Provided

- Design-build Wetland & Stream Restoration
- Wetland Delineation
- §404/401 Permitting
- Hydraulic Modeling
- Reforestation
- Construction Administration & Oversight
- Native Seeding & Planting
- Invasive Vegetation Management

Project Duration

Construction: 2017-2019

Monitoring: 2020-present

Total Project Cost

\$597,000

Key Staff

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Project Highlight No. 4

Buckeye Creek Stream & Wetland Restoration (Total Project Area: 75 acres) Jackson County, Ohio



Post-construction view of backwater wetland and Buckeye Creek.

EnviroScience performed a design-build restoration of over 7,215 LF of stream and over 60 acres of riparian, wetland, and forested floodplain for the Ohio Valley Conservation Coalition (OVCC) in Jackson County, Ohio.

The restoration approach centered on reversing historical impacts to Buckeye Creek that included ditching, dredging, floodplain disconnection, dam construction, in-stream cattle grazing, and invasive species management. The project objectives included improving stream pattern, reconnecting Buckeye Creek to the existing floodplain, the addition of numerous riffle/pool sequences to raise grade and improve stream morphology and habitat, and extensive riparian wetland improvement and expansion. Emphasis was placed on stream channel depth and flow variability to help minimize energy and erosion, while restoring aquatic habitat suitable for ecological improvement. Over-deep pools with woody habitat were incorporated to increase fish habitat. Where suitable, the existing stream pattern was used to stretch available funding. Because the City of Jackson's downstream area is subject to periodic flooding, emphasis was also placed on maximizing the use of floodplains and riparian wetlands to slow, retain, and filter stormwater.

Most material used in the project was either acquired on site to maximize budget and authenticity, or it was sourced locally. Local contractors were used for part of the work, including some excavation, trucking, and reforestation, to benefit the local economy. The team focused on providing multiple ecological, economic, and recreational benefits from the project.

Photo A. Representative pre-construction view of the channelized Buckeye Creek with very little habitat and poor floodplain connection.

Photo B. Post-construction view of a restored riffle/pool sequence prior to tree and live stake planting.



Client
Ohio Valley Conservation Coalition

Key Services Provided

- Design-build Wetland & Stream Restoration
- Wetland Delineation
- Permitting & Agency Coordination
- Construction Administration & Oversight
- Native Seeding & Planting
- Invasive Vegetation Management

Project Duration
2016-2017

Total Project Cost
\$1,375,500

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Summary of Selected EnviroScience Restoration Projects

Project Name	Client	Project Location	Cost	Date of Services	Type of Project	Wetland & Floodplain Acres	Project Manager	Project Goals/ Objectives	How Goals/Objectives were met
Madison Village Wetland Restoration	Madison Village	Lake County, OH	\$473 K	Oct. 2022-Jan. 2023	Wetland, floodplain, and stream restoration: H2Ohio-funded design-build project	4.5	Julie Bingham	Restore and expand existing wetland, create emergent marshland and vernal pool habitat, and restore the stream on former nursery land.	Created 0.96 acres of emergent marshland, 0.91 acres of vernal pool habitat, and 2.6 acres of floodplain, and restored 308 LF of stream. Two Beaver Dam Analogs were installed to encourage pooling to raise the water table in order to support wetland habitat. Plugs and water control structures were installed into the existing drainage ditches to redirect water flow toward backwater wetland areas.
Mud Lake Mitigation Bank	Ohio Department of Transportation	Medina County, OH	\$1.2 M	June-August 2023	Emergent and forested wetland mitigation/ restoration: design-build project	29	Julie Bingham	Restore agricultural land to high-quality wetlands for mitigation.	Category 2 and 3 forested and emergent wetlands were reestablished and Category 1 wetlands rehabilitated. Restoration included disruption of drainage tiles, creation of microtopography and new depressional wetlands, native plantings, and invasive management. AgriDrains and rock spillways were installed to control water levels.
Wilderness Center Wetland Pond Edge Restoration	The Wilderness Center	Stark County, OH	\$65 K	Sept. 2024-Oct. 2025	Shoreline wetland creation: H2Ohio-funded design-build project	0.5	Tom Prewitt	Restore 300 feet of new shoreline to develop wetland habitat.	Creation of microtopography and layered wetland benches, installation of standing dead woody habitat, and native plantings within the shoreline wetland habitat and wetland buffer.
Wolf Creek Floodplain Restoration	Black Swamp Conservancy	Seneca County, OH	\$1.6 M	2022-2023	Riparian wetland restoration: H2Ohio- funded design-build project	45	Tom Prewitt	Restore agricultural land to riparian wetlands to improve water quality through reduction of nutrient and sediment runoff.	Restoration included the removal of drainage tiles, grading of wetland swales, invasive species management, and tree plantings throughout the 88.49 acres of restored riparian woods and wetlands.
Riverwood Golf Course Restoration	West Creek Conservancy	Summit County, OH	\$1.0 M	2023	Floodplain wetland creation and river and headwater stream restoration: H2Ohio design-build project	7.5	Julie Bingham	Golf course conversion to restore culverted, channelized streams, reestablish wetland riparian areas, stormwater retention, mainstem floodplain expansion, stabilization, and habitat improvement.	Restoration included berm removal, in-river habitat enhancement, daylighting culverts to restore the headwater tributaries, creating floodplain wetlands, native seeding/planting, and modifying existing ponds. Golf course grasses were eradicated using spray drone and conventional tank spraying.

Project Name	Client	Project Location	Cost	Date of Services	Type of Project	Wetland & Floodplain Acres	Project Manager	Project Goals/ Objectives	How Goals/Objectives were met
Seasons Road Fen Wetlands Restoration	Portage Park District	Portage County, OH	\$521 K	2022-2023	Emergent wetland and meadow restoration and reforestation: WRRSP-funded design-build project	39.7	Emma Kennedy	Restore a wetland-fen complex and fallow farm field on park land to improve hydrology and water quality and expand buffer zones.	Project included restoration of 5 acres of emergent wetland, 12 acres of upland meadow and 40 acres of reforestation. Restoration included grade controls for water retention within the fen and large-scale invasive management of <i>Phragmites australis</i> .
St. Joseph River Wetland Restoration	Black Swamp Conservancy	Williams County, OH	\$880 K	2020-2022	Wetland and stream restoration: H2Ohio-funded design-build project	56	Julie Bingham	Convert agricultural land to restore wetlands, floodplain, and forest and dechannelize a ditch and an intermittent stream to provide nutrient reduction and fish and wildlife habitat.	Project included wetland creation and enhancement across 13 acres of emergent and scrub shrub wetlands. Over 43 acres of seasonally inundated floodplain were reforested. Nearly 3,000 LF of previously ditched and buried waterways were daylighted and sinuosity and habitat was restored.
Buckeye Creek Stream and Wetland Restoration	Ohio Valley Conservation Coalition	Jackson County, OH	\$1.3 M	2016-2017	Wetland, stream, and floodplain restoration: multi-funded design/build project	60	Julie Bingham	Reverse impacts from former agricultural activities	Project improved stream morphology and habitat, reconnected the floodplain, and improved and expanded extensive riparian wetland habitat to slow, retain, and filter stormwater.
Forrest Woods Nature Preserve Stream and Wetland Restoration	Black Swamp Conservancy	Paulding County, OH	\$730 K	May 2016-April 2017	Wetland and stream restoration: multi-funded design/build project	45	Julie Bingham	Reverse impacts from agricultural activities on two properties to restore natural hydrology and improve habitat.	Restoration improved stream and floodplain hydrology and included interruption of drain tiles and native planting/seeding. Floodplain wetlands were restored, and vernal pools were created. Innovative nutrient reduction and monitoring techniques were used.
The Wilderness Center Mitigation	The Nature Conservancy	Stark County, OH	\$429 K	May 2021-Nov. 2022	Wetland and stream restoration and mitigation: design-build project	11	Julie Bingham	Mitigation and restoration to reverse impacts from agricultural activities to restore natural hydrology and improve habitat.	Restoration included stream realignment, floodplain connection, adding wetland microtopography, and native plantings/seeding. Upland habitat (4.4 acres) was also reforested, and invasive plants were managed across the site.
Weisgerber-Pohlmann Nature Preserve Restoration	Black Swamp Conservancy	Williams County, OH	\$400 K	2021-2022	Wetland creation and reforestation: H2Ohio-funded design-build project	21	Julie Bingham	Restore wetlands, floodplain, and forest on former agricultural land to reduce nutrient and sediment runoff.	Restoration included 14.89 acres of upland forested area and 6.11 acres of wetland area within the nature preserve. Eight vernal pools were constructed to improve viable habitat for flora and fauna.

Project Name	Client	Project Location	Cost	Date of Services	Type of Project	Wetland & Floodplain Acres	Project Manager	Project Goals/ Objectives	How Goals/Objectives were met
Valley View Phase 1 & 2 Stream and Wetland Restoration	Summit Metro Parks	Summit County, OH	\$2.95 M	2015-2020	Wetland, floodplain, and river restoration and reforestation: NOAA-funded design-build project	65	Julie Bingham	Conversion of a former golf course to restore wetlands, floodplain, and the river to improve water quality and habitat.	Restoration of a former golf course for use as a public park that included floodplain expansion, and wetland restoration, and river hydrology restoration. Phase 2 improved floodplain connectivity and capacity and reforested the restored floodplain.
Strait Creek Stream and Wetland Restoration	The Nature Conservancy	Adams County, OH	\$1.2 M	2017-2019	Stream and riparian buffer and wetland mitigation and restoration: design-build project	1.7	Julie Bingham	Mitigation for TNC's in-lieu fee program for stream, wetland, and buffer restoration on a nature preserve.	Over 27 acres of riparian buffer was restored along with 1.7 acres of riparian wetlands. Restored over 7,300 linear feet of stream and generated 8,750 stream mitigation credits. Project included incorporation/expectation of beavers into the design.
Adams Run Stream and Wetland Mitigation	Village of Cuyahoga Heights	Summit County	\$455 K	Oct. 2018-Sept. 2020	Stream, floodplain, and wetland mitigation and restoration: design-build project	1.5	Julie Bingham	Permittee responsible mitigation in an urbanized tributary	New channel was created next to a channelized ditch and floodplain restoration included depressional backwater wetlands as well as excavated legacy valley fill to expose the underlying Carlisle muck soils.
Secor Wetland Restoration	MetroParks Toledo	Lucas County, OH	\$217 K	2018-2024	Wetland, stream, and prairie restoration: WRRSP-funded design-bid project	26.2	Julie Bingham	Conversion of a former golf course to restore wetland, stream, and upland habitat.	Provided site evaluation including topographical and morphological data collection and restoration design to restore a stream, native emergent wetland, forested wetland, wet meadow, and upland prairie habitat. Design included grading, restoring hydrology, and reforestation.
Mentor Marsh Interceptor Mitigation and Wetland Restoration	Lake County and Cleveland Museum of Natural History	Lake County, OH	\$290 K	2017-2018	Emergent wetland mitigation and restoration: design-build project	20	Michael Marefka	Mitigation for impacts of a sewer line replacement within the marsh	Restored approximately 20 acres of Category 3 wetlands by managing invasive vegetation and planting native wetland plants across the entire project site.

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6.4 References

EnviroScience has a long history of successfully delivering wetland creation, restoration, delineation, and permitting projects for state agencies, federal partners, and conservation organizations. The following references can attest to the quality of our wetland work, our technical expertise, and our commitment to responsive communication and dependable project delivery. Additional references and project contacts are available upon request.

Ohio Valley Conservation Coalition

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