

COMPANY TITLE

Environmental Specialist

EDUCATION

- BA, Environmental Studies, The Pennsylvania State University, 2010: Minor in Biology

HEALTH & SAFETY

CERTIFICATIONS & TRAINING

- ISN- 02053363
- PEC-100794105
- Safeland – June 2017
- Southwest Energy Training Assurance Program (TAP) – 2015 Core / Supplement – Oct. 2016
- Shell Contractor HSE Handbook Sept. 2016
- Adult First Aid/CPR– American Heart Association, Pennsylvania – Feb 2016
- Energy Transfer Contractor Safety – Feb 2016
- NCCER Performance Verifications Oct 2013
- AOCFG- Abnormal Operating Conditions- Field NCCER Sept. 2013
- Custom Pipeline Inspector NCCER Sept. 2013
- OSHA 40 Hour HAZWOPER Training; AllProbe Environmental
- Williams Contractor Safety; May 2012

PROFESSIONAL TRAINING

- PADEP Technical Workshops - Prepare for The New Aquatic Resource Condition Assessments (Cb. 105) – June 2017
- The Wetland Training Institute – Planning Hydrology, Vegetation, and Soils for Constructed Wetlands – July 2016
- Swamp School Wetland Wildflowers – June 2016
- Swamp School Field Identification of Wetland Sedges, Grasses and Rushes–June 2016
- PA Botany Steering Committee - A Consulting Botanist's Toolkit Workshop - Dec. 2015
- PAPSS Regional Supplement Hydric Soil Indicators & Wetland Delineation Forms July 2015
- PA Botany Steering Committee - A Consulting Botanist's Toolkit Workshop - Dec. 2015
- The PNPS (Pennsylvania Native Plant Society)– Identification of Grasses, Sedges, and Rushes
- SWS Mid-Atlantic Chapter Wetland Mitigation, Restoration and Ecology State College, PA- April 4-5, 2014
- Pennsylvania Natural Heritage Program – PNDI Updates Presentation Harrisburg, Pa - Dec. 2013
- PA One Call System, Inc. Locater Program – State College, Pa November 2013
- FERC “Environmental Review and Compliance for Natural Gas” San Antonio, Texas Sept. 2013
- PA DEP ESCGP-2 Training July 10, 2013 State College, PA July 2015
- PA SFI® Training; Prof. Timber Harvesting Ess., Wildlife - Young Forest Initiative, Game of Logging - Level 1; May 2012
- Marcellus Workshop "An Update on PHMSA Pipeline Regulations & Act 127" Feb. 2012
- PASPGP-4 Workshop; Army Corps of Engineers, Baltimore District, October 2011
- Regional Supplement to the USACE Delineation Manual, State College, PA – M.N. Gilbert Environmental April 2011

David Wood, PWS

Mr. Wood has more than has 7 years of professional work experience in natural resources management, wetland sciences, soil science, field biology, and plant sciences. Mr. Wood is a Professional Wetland Scientist (PWS) certified by the Society of Wetland Scientists (SWS). He has coordinated and/or contributed significantly to a wide variety of environmental projects throughout the North Atlantic Region. He has worked in both the public and private sectors for a diverse clientele that include government agencies, non-profit entities, corporations, and individuals.

CERTIFICATIONS & QUALIFICATIONS

- Professional Wetland Scientist number 2903
- 2018 Wild Plant Management Permit #18-658
- Ohio Rapid Assessment Method (ORAM) Certification - May 2014
- NCCER Craft Instructor Performance Evaluator Certification - Nov. 2013
- 38-Hour training on the “Army Corps of Engineers Wetland Delineation / Waters of the United States Training” - March 2013

PROFESSIONAL EXPERIENCE

ENVIRONMENTAL SURVEYS

- Performed Pennsylvania rare, threatened and endangered plant surveys and reporting.
- Assisted on several USFWS endangered plant surveys for *Scirpus ancistrochaetus* and *Isotria medeoloides* with several surveys resulting in the identification of *S. ancistrochaetus*;
- Field assistant on multiple Timber Rattlesnake Phase I and II surveys and Allegheny Wood Rat surveys;
- Performed macroinvertebrate sampling; and
- Forest inventory and assessments.

WATER RESOURCE PROJECTS

- Performed water resource delineations and reporting, and performed wetland and stream mitigation monitoring and reporting;
- Conducted wetland and riparian buffer mitigation construction and planting oversight on various mitigation projects throughout Pennsylvania;
- Conducted wetland and stream mitigation monitoring and reporting.
- Collected water samples and onsite water quality data.

ENVIRONMENTAL PERMITTING

- Produced mitigation plans for wetland and stream impacts, including grading plans, vegetative design, vegetative planting zones, enhancement species lists;
- Performed Erosion and Sediment control inspections on gas well sites and pipeline right-of-ways;
- Assisted with a variety of environmental permitting projects; and
- Conservation Methods Storm Waste Water Wetlands;

EQUIPMENT AND MAPPING

- Perform task utilizing Trimble surveying equipment; and
- Utilize GIS software for mapping and data analysis.

COMPANY TITLE

Project Manager

EDUCATION

- *BS, Environmental Resource Management - The Pennsylvania State University, 2008*

CERTIFICATIONS

- *Professional Wetland Scientist – PWS Seal #: 2509*
- *NRCS Technical Service Provider – Wetlands (Interdisciplinary) Biological Components, Pennsylvania TSP#: 15-16310*

HEALTH & SAFETY

CERTIFICATIONS & TRAINING

- *PEC - 100555383*
- *ISN-03232988*
- *Shell Contractor HSE Handbook Sept. 2016*
- *Energy Transfer Contractor Safety Orientation – February 2016*
- *Southwest Energy Training Assurance Program (TAP) – 2015 Supplement, – February 2016*
- *Southwest Energy Training Assurance Program (TAP) 2015 – Core, – February 2016*
- *8 Hour HAZWOPER Refresher Training – AllProbe Environmental – March 2015*
- *Adult First Aid/CPR/AED Training – American Red Cross, Pennsylvania – February 2015*
- *SafeLandUSA Safety Training – PEC Safety – Pennsylvania – July 2014*

PROFESSIONAL TRAINING

- *PADEP Technical Workshops - Prepare for The New Aquatic Resource Condition Assessments (Ch. 105) – June 2017*
- *Applied Fluvial Geomorphology - Wildland Hydrology, Sheperdstown, WV– April 2016*
- *USACE & PA DEP “Pipeline Permitting and Restoration Seminar” – Marcellus Shale Coalition, Pennsylvania – November 2014*
- *Vegetation Identification for Wetland Delineation Rutgers University, New Jersey – June 2012*
- *Hydrology of Wetlands – Rutgers University, New Jersey – May 2012*
- *Methodology for Delineating Wetlands – Rutgers University, New Jersey – November 2011*
- *Riparian Buffer Design Workshop – Berks County Conservation District, Pennsylvania – March 2011*
- *“Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual”: PAPSS, DCNR Bureau of Forestry, Laporte, PA – April 2010*

Jim Haney, PWS

Jim Haney has over 9 years experience with wetland delineation and evaluation, stream restoration, permitting, and environmental monitoring in accordance with national, state, and local criteria and guidelines. Mr. Haney is a Professional Wetland Scientist (PWS) certified by the Society of Wetland Scientists (SWS) that manages the wetland delineation, permit preparation, and agency coordination for projects for WHM. Also, Jim is a certified Technical Service Provider (TSP) for the Natural Resources Conservation Service (NRCS) providing Wetlands (Interdisciplinary) Biological Components assistance to landowners in the state of Pennsylvania.

Additionally, Mr. Haney, specializes in stream restoration, including the survey and design aspects of these projects. Jim regularly works with various watershed organizations, townships and municipalities, non-profit organizations, engineering firms, energy companies, and state and federal agencies.

PROFESSIONAL EXPERIENCE

ENVIRONMENTAL PERMITTING

- Completed local, state, and federal environmental permitting for various types of development and water quality projects, which included detail studies/reports and thorough coordination with regulatory agencies; and
- Coordinated threatened and endangered species surveys through the Pennsylvania Natural Diversity Index (PNDI) program, including Pennsylvania Historical and Museum Commission (PHMC) coordination, with national and state agencies, as well as certified biologists.

WATER RESOURCE PROJECTS

- Completed and assisted with wetland and stream mitigation plans, including designs, in accordance with USACE's *Compensatory Losses of Aquatic Resources* guidance document;
- Delineated or overseen delineations for stream and wetland delineations on more than 300 miles of utility line corridors, as well as numerous land development projects;
- Has helped conduct route development, including crossing locations of stream and wetland features as well as access road placement for utility line corridors;
- Conducted surveys of a number of impaired streams, assisted in creating restoration designs, and conducted as-built surveys of restoration projects;
- Has served as construction oversight and made necessary in field adjustments on more than 3,500 feet of stream restoration projects;
- Has performed Pennsylvania Level 2 Rapid Assessment Protocols for Riverine and Wetland systems to calculate impacts and functional gain for development and mitigation projects;
- Conducted and oversaw post-construction monitoring program as part of special conditions required by Joint Permit approvals;
- Conducted water quality analysis's including: macroinvertebrate sampling and identification and habitat assessment;
- Utilized GPS units for obtaining accurate field data collection and producing detailed mapping for projects; and
- Utilized total station and laser level surveying equipment to obtain longitudinal and cross section profiles of impaired streams and as-built restoration projects.

COMPANY TITLE

Environmental Technician

EDUCATION

- *B.S. Environmental Resource Management, the Pennsylvania State University, 2010*

HEALTH & SAFETY

CERTIFICATIONS & TRAINING-

- *ISN-03894196*
- *Atlantic Sunrise safety training – September 2017*
- *Kinder Morgan Safety Orientation – October 2017*
- *Adult First Aid/CPR– American Heart Association, Pennsylvania – June 2015*
- *OSHA 40 Hour HAZWOPER Training; All Probe Environmental; October 2017*

PROFESSIONAL TRAINING

- *Stream Habitat and Measurements Techniques – National Conservation Training Center – Sheperdstown, WV, March 2017*
- *FWS Geospatial Workshop – National Conservation Training Center – Sheperdstown, WV, March 2016*
- *Overview of Wetland Delineation Protocols and the Interim NC/NE Regional Supplement to the USACE Delineation Manual – State College, PA, April 2011*

Curtis George

Curtis George graduated from the Pennsylvania State University with a B.S. degree in Environmental Resource Management and minors in Watershed and Water Resource Management and Wildlife and Fisheries sciences. Throughout his career, Curtis has worked with private, state and federal agencies to gain experience performing a wide range of biological tasks throughout the United States. He has a background with wetlands and watershed management and has gained lots of knowledge performing surveys and using GIS software.

PROFESSIONAL EXPERIENCE

ENVIRONMENTAL EXPERIENCE

- Led wetland crews to perform wetland delineations for proposed construction sites;
- Participated in surveys of biological and physical parameters for stream restoration projects;
- Performed construction oversight for wetland creation projects;
- Performed a variety of biological surveys for birds, macroinvertebrates, herps, fish and plants;
- Controlled invasive plants and animal species using both manual and chemical means;
- Raised fish for stocking in state waterways;
- Contributed to report writing and permit preparation;
- Performed post construction monitoring on various oil and gas related projects.

MAPPING AND SURVEYING

- Used survey grade Trimble equipment to perform RTK elevation surveys for various biological and resiliency projects.
- Performed bathymetry surveys for creating sediment and water movement models;
- Utilized GIS software to create maps for various projects and to manipulate survey data;
- Performed surveys and tasks using Trimble Juno Series and GeoHX handheld GPS units;
- Used various GPS units to navigate the back country.

COMPANY TITLE

*Environmental Specialist
Health and Safety Officer (HSO)*

EDUCATION

- *Environmental Soil Science, Bachelors of Science, The Pennsylvania State University, University Park, Pennsylvania, 2009*

CERTIFICATIONS

- *Professional Wetland Scientist #2560*
- *Maryland Department of the Environment Erosion & Sediment Control Responsible Person Certification #RPC010292*

PROFESSIONAL TRAINING

- *PADEP Technical Workshops - Prepare for The New Aquatic Resource Condition Assessments (Ch. 105) – June 2017*
- *Identification of Wetland Wildflowers, Swamp School, LLC - June 2016*
- *SWS Mid-Atlantic Chapter Dr. Robert Brooks of Penn State University and Riparia on Using Natural Reference Wetland Data for Wetlands Mitigation and Restoration Projects, State College, PA- April 4-5, 2014*
- *Ohio Rapid Assessment Method for Wetlands v. 5.0 2014 Training Course, April 2015*
- *PA DEP ESCGP-2 Training July 2013 State College, PA*
- *E&S Manual Training – Scranton, PA - PA Association of Conservation Districts - May 2013, at the Hilton Scranton & Conference Center*
- *Hydric Soil Indicators Field Seminar April 2013 PASS-Stoll Natural Resources Center, Wyoosox, PA*
- *Primary Headwater Habitat Assessment Training – West Woods Metro Park, Geauga County, Ohio May 2012*
- *“Planning Hydrology for Constructed Wetlands”, Wetland Training Institute, State College, PA November 2011*
- *“Grasses, Sedges, and Rushes” Pennsylvania Institute for Conservation Education, Shavers Creek Environmental Center, Huntingdon, PA August 2011*
- *Hydrology of Wetlands Rutgers University – New Jersey Agricultural Experiment Station Tuckerton, New Jersey May 2011*
- *“Functional Assessment as the Basis for Mitigation of Wetland Impacts”, State College, PA – M.N. Gilbert Environmental April 2011*
- *ACOE Wetland Delineation/Regional Supplement Training Richard Chinn State College, March 2010*

Paul Fisher, PWS

Mr. Fisher is a graduate from The Pennsylvania State University in 2009, where he was awarded a Bachelors degree in Environmental Soil Science. Mr. Fisher is a Professional Wetland Scientist (PWS) certified by the Society of Wetland Scientists (SWS) that manages field and wetland crews for WHM. Mr. Fisher has over 8 years of professional experience with GIS Analysis and Mapping, environmental permitting, wetland delineations, stream assessments, pipeline routing, wetland mitigation, functional assessments, ORAM, riparian planting, project management and oversight.

Mr. Fisher is also the Health and Safety Officer at WHM responsible for the development and implementation the corporate Health and Safety Plan. He maintains safe working environments, establishes effective best practices, prevention measures, and rapid response processes. Mr. Fisher specializes in protecting workers, assets and the community in the most cost-effective manner.

PROFESSIONAL EXPERIENCE

GENERAL ENVIRONMENTAL PROJECTS

- Used GIS software for mapping and analysis;
- Used a Trimble GPS for mapping boundaries for mapping purposes;
- Composed various Environmental Reports for landfills, gas companies, wind farms, construction companies, private landowners, and regulatory agencies;
- Performed land analysis's using GIS Software for determining suitable areas for development; and
- Completed various Environmental Permits for clients.

ENVIRONMENTAL PROJECTS

- Performed wetland monitoring and maintenance on various wetlands;
- Performed Stream Surveys;
- Practiced wetland delineations using US Army Corps of Engineers Wetlands Delineation Manual 1987 and applicable regional supplements;
- Used the Pa Code Chapter 93 Water Quality Standards and Chapter 105 Dam safety and Waterway Management;
- Used surveying equipment to characterize stream profiles for mapping and design purposes;
- Delineated wetlands and water resources at several projects throughout Pennsylvania, Ohio and West Virginia; and
- Managed several wetland projects in Pennsylvania and Ohio.

HEALTH & SAFETY CERTIFICATIONS & TRAINING

- PEC - 100794102
- ISN- 02053343
- Safeland September 2016
- Shell Contractor HSE Handbook Sept. 2016
- OSHA Safety Training Working in Wetlands, Swamp School, LLC – April 2016
- Oil & Gas Safety & Health Professional Certification Feb. 2016
- Adult First Aid/CPR– American Heart Association, Pennsylvania – Feb 2016
- Energy Transfer Contractor Safety Orientation Instructor Dec. 2015
- NCCER Craft Instructor Performance Evaluator Certification October 2013
- Southwestern Energy Training Assurance Program Instructor Certification Oct. 2013
- NCCER Performance Verifications Feb. 2013 - PV151 15.1 - PV152 15.2 - PV320 32.0
- AOCFG- Abnormal Operating Conditions- Field NCCER Sept. 18, 2013
- Custom Pipeline Inspector NCCER Sept. 2013
 - Task 15 - 15.1, 15.2 & Task 32
- OSHA 40 Hour HAZWOPER Training; All Probe Environmental; June 2013
- Occupational Safety and Health Professional Certification May 2012
- Williams Contractor Safety; May 2012

COMPANY TITLE

CAD Technician/Environmental Technician

Carissa Butler

EDUCATION

- *BA, Anthropology; Journalism, Public Relations, & Advertising, Temple University, 2008*

HEALTH & SAFETY

CERTIFICATIONS & TRAINING

- *PEC - 100794100*
- *ISN- 02365544*
- *Energy Transfer Contractor Safety Orientation Dec. 2016*
- *Southwestern Energy (SWN) Training Assurance Program (TAP) Oct. 2016*
- *Sbell Contractor HSE Handbook Sept. 2016*
- *Safeland September 2016*
- *Adult First Aid/CPR– American Heart Association, Pennsylvania – Feb 2016*
- *OSHA 24 Hour HAZWOPER Training; All Probe Environmental; July 2014*

PROFESSIONAL TRAINING

- *AutoCAD Civil 3d Training; Print-O-Stat, Inc. Software Solutions Division June 2017*
- *AutoCAD Civil 3d 2017 Introduction, CAD Advisers June 2016*
- *Pennsylvania Association of Professional Soil Scientists Hydric Soils Indicators – Field Seminar and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region July 15-16, 2015*
- *Federal Energy Regulatory Commission Environmental Review and Compliance for Natural Gas Facilities Seminar Memphis, TN Feb. 10-12, 2015*
- *38 Hour Army Corps of Engineers Wetland Delineation Training, Richard Chinn Environmental Training, Inc. March 10-13, 2014*
- *Pennsylvania Association of Professional Soil Scientists Hydric Soils Indicators – Field Seminar and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region April 2013 Bradford County Conservation District Wyoaze, PA*
- *Minnesota Department of Natural Resources Project Management Leadership February 2011 St Paul, MN*
- *Alaska State and National Parks Safe Hand Tool Use and Maintenance June 2008 Anchorage, AK*

Miss Butler graduated from Temple University with degrees in Anthropology and Journalism, Public Relations, and Advertising. Since graduation, she has worked on resource restoration projects with natural resource professionals in Alaska, Minnesota, and Pennsylvania. She has been associated with numerous projects at many different levels and has gained a vast knowledge of all aspects of environmental permitting. She gained skills through her previous experiences and WHM Consulting, Inc. in various environmental projects dealing with water quality, habitat restoration, and land use. As a CADD and GIS Technician for WHM, she is responsible for developing and maintaining geographic, political and environmental databases that are pertinent to the region.

PROFESSIONAL EXPERIENCE

MAPPING AND SURVEYING

- Plan, design, draft and analyze topographic plans and details using AutoCAD Civil 3D 2013 for various projects utilizing field collected data and other associated data;
- Used GIS software for compiling field collected data, land use data, tabular data, and other data to produce figures for analysis and to calculate statistics of various environmental projects;
- Utilized GPS units for surveying various points and boundaries for mapping purposes;
- Performed land analysis's using GIS Software for determining suitable areas for development based on environmental parameters; and
- Performed surveys and tasks using Trimble Juno Series and GeoHX handheld GPS units.

ENVIRONMENTAL TECHNICIAN

- Provided on the ground project management and implementation for a variety of trail building and maintenance projects in central and southeast Alaska;
- Assisted with a variety of environmental permitting projects;
- Performed water resource delineations and reporting, and performed wetland and stream mitigation monitoring and reporting;
- Led quality control teams on previously blasted seismic testing areas in Pennsylvania State Forests and Game Lands;
- Developed curriculum and led in-field and classroom trainings and workshops on hand tool use and maintenance, science and environmental education, leadership skills, safety and risk management, and wilderness survival;
- Performed invasive species assessment and removal;
- Assisted with juvenile fish surveys via electro fishing and trapping;
- Worked on Alaska DOT and Alaska Moose Federation projects, accessing vegetative conditions surrounding highway features and employing corrective measures to facilitate safer conditions for motorists and the Alaska moose population;
- Led Alaskan native youth on backcountry camping trips and habitat restoration projects; and
- Experienced grant and proposal writer.

COMPANY TITLE

Project Manager

EDUCATION

- BA, *Environmental Studies, The Pennsylvania State University, 2006*

CERTIFICATIONS

- *Professional Wetland Scientist #2285*

HEALTH & SAFETY

CERTIFICATIONS & TRAINING

- *PEC - 100794096*
- *ISN- 02053332*
- *Energy Transfer Contractor Safety Orientation Dec. 2016*
- *Southwestern Energy (SWN) Training Assurance Program (TAP) Oct. 2016*
- *Shell Contractor HSE Handbook Sept. 2016*
- *Safeland September 2016*
- *OSHA 40 Hour HAZWOPER Training; All Probe Environmental; October 2016*
- *Adult First Aid/CPR- American Heart Association, Pennsylvania – Feb 2016*
- *Williams Contractor Safety; May 2012*

PROFESSIONAL TRAINING

- *PADEP Technical Workshops - Prepare for The New Aquatic Resource Condition Assessments (Ch. 105) – June 2017*
- *PASPGP-5 Training, Marcellus Shale Coalition, Hershey PA – July 2016*
- *Chapter 102/NPDES Training Centre & Clinton County Conservation Districts, March 2016*
- *PADEP ESCGP-2 Permit Training, State College, PA July 2013*
- *Planning Hydrology, Vegetation, and Soils for Constructed Wetlands – The Wetland Training Institute; State College, PA – Sept 10-12, 2012*
- *Erosion & Sediment (E&S) Manual Training (Northampton Co) by the PACD in conjunction PADEP August 20, 2012*
- *Primary Headwater Habitat Assessment Training – West Woods Metro Park, Geauga County, Ohio, May 23, 2012*
- *"Functional Assessment as the Basis for Mitigation of Wetland Impacts State College, PA – M N Gilbert Environmental April 2011*
- *PaDEP—Technical Review of the revised Chapter 102 Regulations, Penn Tech Campus, Williamsport, PA – Dec. 2010*
- *"Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual": PAPSS, DCNR Bureau of Forestry, Laporte, PA - April 2010*
- *Department of Environmental Protection "Regulatory Requirements Seminar for Marcellus Shale"; Harrisburg, PA - March 2010*
- *Wetland Delineator Training, Institute for Wetland & Environmental Education & Research, Inc, Tiner and Veneman, Albany, New York – July 2008*
- *Plant ID: Wetlands & Their Borders, Institute for Wetland & Environmental Education & Research, Inc, Albany, New York - July 2008*
- *DEP Stormwater Best Management Practices Manual Training Session, State College, Pennsylvania - May 2007*

Kevin Clark, PWS

Mr. Clark has over 12 years experience with wetland delineation and evaluation, permitting, mitigation design, and the preparation/management of environmental compliance documents in accordance with federal, state, and local criteria and guidelines. He is a Professional Wetland Scientist (PWS) certified by the Society of Wetland Scientists (SWS). He manages the design and construction of habitat and wetland restoration, enhancement and replacement projects. Additionally, he specializes in environmental permitting for land development projects with experience in Pennsylvania, West Virginia, Ohio and Maryland. He has continuously gained skills through his work experience and interaction with regulatory agencies. Currently, Mr. Clark manages a variety of land development and mitigation projects.

PROFESSIONAL EXPERIENCE

ENVIRONMENTAL SURVEYS & PERMITTING

- Project Management of land development projects requiring local, state and federal permit authorizations with an emphasis on energy related infrastructure, landfills and wetland/stream mitigation.
- Completed and managed small to large scale delineations throughout the in PA, OH, WV, and MD in accordance with 1987 USACE Wetland Delineation Manual and applicable regional supplements;
- Oversee subcontractors and internal personnel associated with wetland and stream restoration/mitigation projects, threatened and endangered species surveys, and archeological surveys;
- Utilized survey-grade GPS units for high accurate field data collection to produce detailed mapping;
- Proficient in providing detailed mapping and design drawings utilizing AutoCAD and ArcGIS software;
- Completed numerous watershed assessments to determine point and non-point Performed and/or managed wetland delineations
- Client and regulatory liaison for projects involving land development and environmental restoration.

WATER RESOURCE RESTORATION/MITIGATION PROJECTS

- Responsible to property acquisition of potential water resource mitigation projects;
- Completed over 100 wetland and stream mitigation plans, including design and permitting in accordance with USACE's *Compensatory Losses of Aquatic Resources* guidance document;
- Manages construction oversight and monitoring of wetland and stream restoration/mitigation projects in accordance with applicable permit conditions;
- Completed watershed assessments and restoration plans;
- Conducted water quality analysis's including: water sampling, macroinvertebrate sampling/identification and general habitat assessment;
- Managed numerous Growing Greener, Chesapeake Bay Small Watershed Grant and other grants associated with stream restoration for non-profit organizations and county conservation districts;

CONFERENCES & SEMINARS

- Federal Energy Regulatory Commission (FERC) Environmental Seminar, Marcellus Shale Coalition, State College, PA – May 2017
- Southern Gas Association (SGA) Technical Conference on Environmental Permitting & Construction, Dallas TX – Feb. 2017
- National Mitigation & Ecosystem Banking Conference, Fort Worth, TX – May 2016
- FERC "Environmental Review and Compliance for Natural Gas Facilities Seminar" Tampa, Florida – Dec. 2015
- SWS Mid-Atlantic Chapter Wetland Mitigation, Restoration and Ecology State College, PA – April 2014

COMPANY TITLE

Project Manager

EDUCATION

- B.S., *Environmental Resource Management, with minors in Watershed/Water Resources and Environmental Soil Science* The Pennsylvania State University, 2008

CERTIFICATIONS

- *Professional Wetland Scientist (PWS)*
PWS Seal # 2412

PROFESSIONAL TRAINING

- *ESCGP-2 to ESCGP-3: New PA DEP Reviewer Process and Permit Implementation Seminar; Marcellus Shale Coalition; December 13, 2017*
- *PADEP Technical Workshops - Prepare for The New Aquatic Resource Condition Assessments (Ch. 105) – June 2017*
- *PADEP MS4 Workshop, Harrisburg PA – Sept. 2016*
- *PHMSA's Proposed Rules for Natural Gas, Kinetic Pittsburgh, PA – Aug. 2016*
- *PA Marcellus Shale Coalition, PASPGP-5 Training, Hershey PA July 2016*
- *Identification of Wetland Wildflowers, Swamp School, LLC – June 2016*
- *"River Assessment & Monitoring" May 9-19, 2016 at the National Conservation Training Center Shepherdstown, WV*
- *Chapter 102/NPDES Training for Consultants and Engineers held by Clinton and Centre County Conservations Districts and PADEP – March 2016 – State College, PA*
- *PA DEP ESCGP-2 Training July 10, 2013 State College, PA*
- *Erosion & Sediment (E&S) Manual Training (Northampton Co.) by the PACD in conjunction PADEP August 20, 2012*
- *"Functional Assessment as the Basis for Mitigation of Wetland Impacts - Overview and Discussion", State College, PA – M.N. Gilbert Environmental April 2011*
- *PaDEP—Technical Review of the revised Chapter 102 Regulations, Harrisburg, PA, February 2011.*
- *Natural Channel Design Review Methodology: U.S. Fish & Wildlife Service National Conservation Training Center, Shepherdstown, WV October 2010*
- *"Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual": PAPSS, DCNR Bureau of Forestry, Loyalsock State Forest Resource Mgt Center, Laporte, PA April 2010*
- *Stream Restoration: Elements of Design Workshop II University Park, PA. August 2008*

Ryan Nelson, PWS

Mr. Nelson is a Professional Wetland Scientist (PWS) certified by the Society of Wetland Scientists (SWS) that manages the design, permitting, and construction of stream and wetland restoration projects and land development projects for WHM. He has experience dealing with water encroachment permitting, erosion and sediment control, wetland delineations, stream assessments, GIS Analysis and Mapping, and Project Management. He has continuously gained skills through his academic and work experience in various environmental projects dealing with water quality, land development, aquatic resource mitigation and restoration, and currently oversees a variety of development projects.

Mr. Nelson has been professionally trained by Wildland Hydrology in Rosgen's Natural Channel Design and is certified in Levels I, II and III - "Applied Fluvial Geomorphology", "River Morphology & Applications", and "River Assessment & Monitoring."

PROFESSIONAL EXPERIENCE

ENVIRONMENTAL PROJECT MANAGEMENT

- Oversee permitting of development projects, including pipelines, wind power generation, landfills and aquatic resource mitigation/restoration;
- Environmental Permitting for the PA DEP and U.S. Army Corp of Engineers including, but not limited to NPDES, E&S Plans, Joint Permits, and General Permits;
- Threatened & Endangered Species and Cultural Resource consultation for land development projects, including state and federally sensitive resources; and
- Client and regulatory liaison for projects involving land development and environmental restoration.

WETLAND AND STREAM PROJECTS

- Collected and analyzed data associated with stream restoration projects including, Stream Profile and Cross section data, bar sampling, pebble counts, and bathymetric data;
- Construction oversight of multiple stream restoration projects involving channel stabilization and rebuild;
- Performed wetland and stream delineations in PA, OH, and WV; and
- Performed wetland monitoring and maintenance on mitigation wetland sites.

MAPPING AND SURVEYING

- Used GIS software for compiling field collected data, land use data, tabular data, and other data to produce figures for analysis and to calculate statistics of various environmental projects;
- Utilized GPS units for surveying various points and boundaries for mapping purposes, including wetland delineations;
- AutoCAD mapping for various projects, including stream restoration and wetland mitigation projects, utilizing field collected data and other associated data;
- Use of survey equipment and AutoCAD Software in characterizing pre and post construction conditions for mapping and design purposes on various projects including stream stabilization, wetland mitigation, and other aquatic resource related projects.

BIOLOGICAL SURVEYS

- Completed and managed studies for the USFWS, DCNR, PGC, and the PFBC for rare, threatened, endangered, and species of special concern within the purview of all the above agencies.

CONFERENCES & SEMINARS

- Federal Energy Regulatory Commission (FERC) Environmental Seminar, Marcellus Shale Coalition, State College, PA - May 2017
- Southern Gas Association (SGA) "Technical Conference on Environmental Permitting & Construction" Dallas, TX Feb. 22-24, 2017
- FERC Environmental Review and Compliance for Natural Gas Facilities Seminar - Tampa, Florida – Dec 2015
- Seminar for Hardwood Forest Reforestation on Abandoned Mine Sites. Ebensburg, Pennsylvania, June 2007

COMPANY TITLE

Timber Rattlesnake & Woodrat Surveyor

EDUCATION

- *M.S. Biological Science, East Stroudsburg University 2007*
- *B.S. Wildlife and Fisheries Sciences, Pennsylvania State University 2003*

CERTIFICATIONS

- *Pennsylvania Fish & Boat Commission Approved Timber Rattlesnake Surveyor and Construction Site Monitor*
- *NJ Approved Primary Venomous Snake Monitor*

HEALTH & SAFETY

CERTIFICATIONS & TRAINING

- *ISN- 03232972*
- *40 Hour HAZWOPER – March 2016*
- *Energy Transfer Contractor Safety Orientation - December 2016*
- *Southwest Energy Training Assurance Program (TAP) – 2015 Core and Supplement – December 2016*
- *Shell Contractor HSE Handbook Sept. 2016*
- *Adult First Aid/CPR– American Heart Association, Pennsylvania – February 2016*

PROFESSIONAL TRAINING

- *Army Corps of Engineers Wetland Delineation / Regional Supplement / Waters of the United States Training – April 2016*

Philip R. Dunning

Mr. Dunning is recognized by the Pennsylvania Fish & Boat Commission as a Qualified Timber Rattlesnake Surveyor and by the New Jersey Endangered and Threatened Species Program as a Qualified Timber Rattlesnake Biologist and Surveyor. He specializes in surveys and studies of threatened and endangered species, general herpetological surveys, endangered mammal surveys, biological/ecological assessments, and natural resource inventories. He is also experienced in vernal pool surveys, Bog Turtle Surveys, presence/absence determination, and macro invertebrate sampling.

PROFESSIONAL EXPERIENCE

TIMBER RATTLESNAKE EXPERIENCE

- Oversee Timber Rattlesnake Projects;
- Led/supervised/managed phase I, II and III timber rattlesnake surveys throughout Pennsylvania and New Jersey;
- Completed and submitted final technical proposals and reports related to phase I, II and III surveys and studies;
- Published presentation abstracts and popular articles in scientific journals or newsletters;
- Conducted timber rattlesnake construction monitoring projects; and
- Timber Rattlesnake Historic Den Assessments.

OTHER RELEVANT EXPERIENCE

- Natural Environment Inventories and Analysis;
- Endangered Species Surveys;
- Qualified New Jersey Primary Venomous Snake Monitor;
- Northern Copperhead Habitat Field Work;
- Northern Copperhead Trapping for Telemetry Project;
- Bog Turtle Phase I Habitat Assessments;
- Bog Turtle Phase II Physical Surveys and Trapping Services;
- Wetland Assessments and Delineations;
- Phase I and Phase II Timber Rattlesnake Survey Crew Leader;
- Phase I Allegheny Woodrat Surveys;
- Presence/Absence surveys for Small-footed Myotis;
- Bat Mist-Netting Technician;
- Southern Hognose, Canebrake, Pine Snake Radio Tracking;
- Whip-poor-will and Chuck-Will's-Widow Point Call Survey; and
- Macro-Invertebrate Sampling.