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Header 1

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1131010

Procurement Type: Central Contract - Fixed Amt

Vendor ID:

Legal Name: POTESTA & ASSOCIATES 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: DNR2300000001

Published Date: 11/4/22

Close Date: 11/22/22

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: 1131010
Solicitation Description: A&E - Meadow River WMA Wetlands Project
Proc Type: Central Contract - Fixed Amt

Solicitation Closes	Solicitation Response	Version
2022-11-22 13:30	SR 0310 ESR11212200000002452	1

VENDOR
000000173443
POTESTA & ASSOCIATES INC

Solicitation Number: CEOI 0310 DNR2300000001

Total Bid: 0 **Response Date:** 2022-11-21 **Response Time:** 14:36:39

Comments:

FOR INFORMATION CONTACT THE BUYER

Joseph 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.



November 22, 2022

Mr. Josh Hager
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, West Virginia 25302-0130

RE: Statement of Qualifications
Meadow River WMA Wetlands Project
Solicitation No. CEOI 0310 DNR2300000001
Fayette and Summers Counties, West Virginia
Project No. 0101-22-0335

Dear Mr. Hager:

Potesta & Associates, Inc. (POTESTA) appreciates the opportunity to submit this Letter of Interest to the West Virginia Division of Natural Resources (WVDNR) to provide preliminary studies and design of a new Public Wetlands Area in the Meadow River Wildlife Management Area (WMA) in Fayette and Summers County, West Virginia. POTESTA has completed numerous wetland mitigation and recreational development projects involving wetland creation, geotechnical, civil, geological, hydrological, and reclamation engineering; land use planning; stream and water restoration; hydrology/geology; and post reclamation land uses. In addition, we have open-ended statewide contracts with various state agencies. As a result, POTESTA will provide the required expertise to complete this project in a timely, economical, and efficient manner. The required documentation for this project is attached to this Letter of Interest.

POTESTA has a qualified staff of scientists and engineers who are trained and experienced in the identification of jurisdictional waters, including evaluations to identify and delineate the boundaries of streams and wetlands in 100s of sites across West Virginia. The evaluations are performed in accordance with methods described in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987) and applicable regional supplement for the project. Jurisdictional streams are delineated utilizing the “bed-and-bank” method and applicable federal standards that are continuing to evolve.

POTESTA’s project team will make sure that this project receives priority and regular communication with project updates provided to WVDNR to allow for projects that move quickly and stay under budget. We know that communication is the key to successful projects. **Ms. Jessica L. Yeager, Senior Scientist**, will serve as **Project Manager** and has extensive wetland experience. Ms. Yeager recently served as Project Manager for first year monitoring of a wetland restoration site in Preston County, West Virginia for a large utility provider.

POTESTA will make our experienced personnel immediately available for this project. Our

Mr. Josh Hager
November 22, 2022
Page 2

commitment is to provide quality service, rapid response, project completion, and to exceed your expectations for services performed under this project. We believe the track record of our professionals demonstrates our abilities, and we look forward to once again serving WVDNR and our great Mountain State.

Sincerely,

POTESTA & ASSOCIATES, INC.



Dana L. Burns
Vice President

DLB/kjt



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: 1131010

Doc Description: A&E - Meadow River WMA Wetlands Project

Reason for Modification:

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2022-11-04	2022-11-22 13:30	CEOI 0310 DNR2300000001	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 : Potesta & Associates, Inc.

Address : 7012 MacCorkle Avenue, SE

Street :

City : Charleston

State : West Virginia

Country : United States

Zip : 25304

Principal Contact : Dana L. Burns, P.E., P.S., Vice President

Vendor Contact Phone: (304) 342-1400

Extension:

FOR INFORMATION CONTACT THE BUYER

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

Vendor
Signature X 

FEIN# 31-1509066

DATE 11-21-2022

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

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Dana L. Burns, P.E., P.S., Vice President

(Address) 7012 MacCorkle Avenue, SE, Charleston, WV 25304

(Phone Number) / (Fax Number) (304) 342-1400 / (304) 343-9031

(email address) dlburns@potesta.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Potesta & Associates, Inc.

(Company)



(Signature of Authorized Representative)

Dana L. Burns, P.E., P.S., Vice President

11-21-2022

(Printed Name and Title of Authorized Representative) (Date)

(304) 342-1400 / (304) 343-9031

(Phone Number) (Fax Number)

dlburns@potesta.com

(Email Address)

ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: CEOI 0310 DNR2300000001

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

- ☐ Addendum No. 1
- ☐ Addendum No. 2
- ☐ Addendum No. 3
- ☐ Addendum No. 4
- ☐ Addendum No. 5

- ☐ Addendum No. 6
- ☐ Addendum No. 7
- ☐ Addendum No. 8
- ☐ Addendum No. 9
- ☐ Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Potesta & Associates, Inc.

Company



Authorized Signature

11-21-2022

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Potesta & Associates, Inc.

Authorized Signature: *Diana L. Burns* Date: 11-21-2022

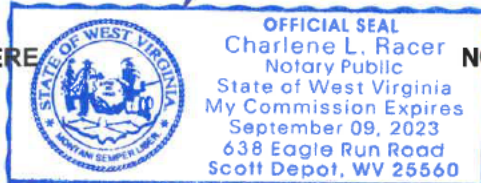
State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 21st day of November, 2022.

My Commission expires September 9, 2023.

AFFIX SEAL HERE



NOTARY PUBLIC

Charlene L. Racer

Purchasing Affidavit (Revised 01/19/2018)

STATEMENT OF QUALIFICATIONS

PREPARED
BY:



PREPARED
FOR:



Meadow River WMA Wetlands Project CEOI 0310 DNR2300000001



OFFICES
IN: **CHARLESTON**
7012 MacCorkle Avenue, SE
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Appendix

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STATEMENT OF QUALIFICATIONS



EXECUTIVE SUMMARY

Potesta & Associates, Inc. (POTESTA) is pleased to present our Statement of Qualifications to the West Virginia Division of Natural Resources (WVDNR) to provide preliminary studies pertaining to design options related to the construction cost to create a new Public Wetlands Area at the Meadow River Wildlife Management Area (WMA). POTESTA understands the wetland area is needed to provide improved water quality and water supply, erosion control, flood abatement, and habitat enhancement. POTESTA has extensive experience in stream and wetland identification/delineation, mitigation development and planning, and permitting with the following agencies: United States Army Corps of Engineers (USACE), West Virginia Department of Environmental Protection (WVDEP), WVDNR, West Virginia State Historical Preservation Office (SHPO), United States Fish and Wildlife Service (USFWS), and United States Environmental Protection Agency (USEPA).

Meadow River WMA occupies 2,385 acres of river bottomland which mainly consists of wetland habitat, but also includes forest and woodland habitats, rock outcrop, cliffs and talus and shale baren habitats, aquatic, floodplain and riparian habitats, karst and cave habitats, and agricultural habitats. POTESTA is currently the Engineer-of-Record for several West Virginia Conservation Districts and has successfully completed numerous engineering and environmental projects for the WVDNR. We understand the importance of conservation and management of habitats to benefit a variety of wildlife species and will work to minimize impacts to species and their current habitats during development projects.

WMAs also provide hunting, fishing, and other recreational opportunities for residents and visitors in West Virginia. POTESTA has worked on numerous recreational engineering and environmental projects throughout West Virginia. These projects include, but are not limited to, parking, campground sites, utility design (drinking water, power/telecom, etc.), trail enhancement projects, natural stream/pond restoration/design/permitting, endangered species studies, WVDEP Abandoned Mine Lands economic development, reclamation, and drinking water projects, site grading and stormwater plans, and a variety of infrastructure and construction projects that require state and federal permitting.

POTESTA believes protecting and enhancing natural environments is vital to the environmental, economic, educational, recreational, and aesthetic landscape of West Virginia. Our project team of experienced scientists and engineers to design the Meadow River WMA New Public Wetlands Area is committed to the following:

- Conservation of the current ecosystems
- Innovative design approach that not only benefits wildlife and habitats, but also the numerous partners and stakeholders across the State
- Species-specific design to current wetlands and climate
- Design that is sustainable and maintainable
- Fencing, proper signage, and slope stability for construction safety



POTESTA can provide civil, geotechnical, and environmental engineering services including surveying, cost estimates, plans, designs, permitting, analyses, site drawings, inspections, specifications, monitoring, reporting, construction management, and related services necessary for the design of the new Public Wetlands Area at Meadow River WMA. POTESTA believes the collaboration between scientists and engineers is integral to address the wide array of project's needs. Our project team brings the experience and knowledge to serve the WVDNR on this project and bring it to completion. We look forward to continuing our relationship and are available to meet to answer any questions and discuss your needs in further detail.

STATEMENT OF QUALIFICATIONS



CORPORATE PROFILE

POTESTA was founded in 1997 in Charleston, West Virginia by Mr. Ronald Potesta. Since the inception of the firm, POTESTA has been providing quality engineering and environmental consulting services throughout the Mid-Atlantic region and maintains a diverse staff of experienced engineers, scientists, and support personnel with branch offices in Winchester, Virginia and Morgantown, West Virginia. Our clients include local, state and federal agencies, mining, manufacturing and chemical companies, utility companies, waste management companies, land developers, attorneys, financial institutions, insurance companies, K-12 schools/colleges/universities, construction companies, and architects.



MORGANTOWN, WV



WINCHESTER, VA



CHARLESTON, WV

VARIED RANGE OF PROFESSIONAL SERVICES

- Air
- Asbestos Inspection
- Biological and Toxicological
- Civil Engineering and Design
- Coal Supply and Procurement
- CADD
- Construction Monitoring
- Endangered Species Consultation
- Environmental Emergency Response
- Environmental Management System
- Environmental Site Assessment
- Environmental, Safety, and Management Systems Auditing
- Environmental-Reclamation Liability Assessments
- Geographic Information Systems
- Geotechnical Engineering
- Groundwater
- Hydrology and Hydraulics Design
- Landfills and Solid Waste Management
- Land Management
- Litigation Support
- Mining
- Mixing Zone Analysis and Diffuser Design
- Occupational Safety and Health
- Oil and Natural Gas
- Permitting
- Remedial
- Risk-Based Remediation
- Roadway Engineering and Design
- Sampling
- Site Design
- Solar Development
- Storage Tanks
- Stormwater
- Stream Restoration
- Surveying and Mapping
- Water and Wastewater Engineering
- Water Quality Study
- Wetlands

STATEMENT OF QUALIFICATIONS



CORPORATE PROFILE

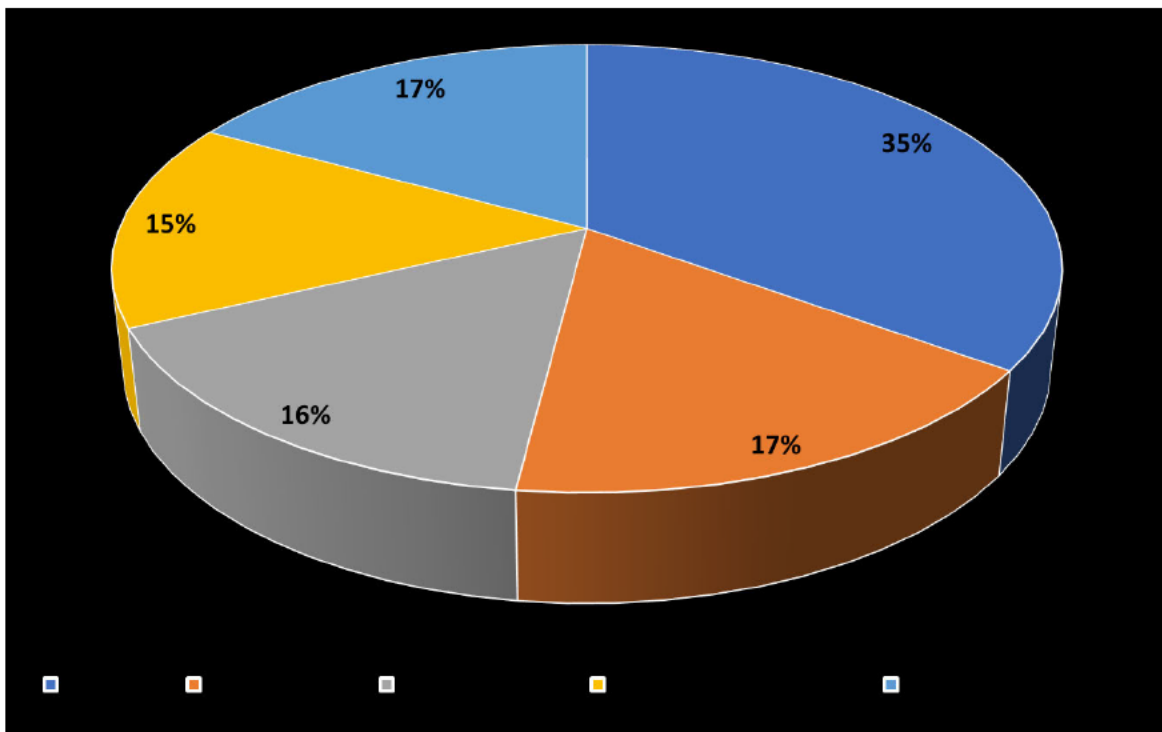
LEADERSHIP

Ronald R. Potesta, President, has served as the Director and Deputy Director of West Virginia's Department of Natural Resources (WVDNR) which, during his tenure, housed all of the environmental regulatory programs, wildlife management, and law enforcement. Mr. Potesta's principal area of specialization is federal and environmental regulatory, statutory schemes, and environmental guidance, including agency interaction and review of regulatory requirements and recommendations.

Dana L. Burns, PE, PS, Vice President, has more than 43 years' experience with the management of civil, geotechnical, mining, and environmental engineering projects, including preliminary feasibility evaluations, detailed design, and preparation of construction drawings, specifications, and bid documents. He has been the Principal-in-Charge on numerous projects completed for local and state governments, municipalities, public service districts, utility providers, residential and commercial developers, universities/colleges, and manufacturing facilities.

David K. Paylor, MS, Vice President of Environmental, has over 45 years of public service protecting natural resources in the Commonwealth of Virginia. His most recent role for the past 16 years was Director of the Virginia DEQ appointed by Governor Tim Kaine, Governor Bob McDonnell, Governor Terry McAuliffe, and Governor Ralph Northam. Mr. Paylor's expertise includes waste management, water quality and quantity measurement, air quality management and climate control, pollution prevention, and environmental justice.

TOTAL STAFF: 83



Certifications—14 Professional Engineers (PE), 4 Engineers-In-Training (EIT), 5 Professional Surveyors (PS), 5 Licensed Remediation Specialists (LRS), 1 GIS Specialist, 3 Licensed Asbestos Inspectors, 1 Opacity Observer, 2 WV Certified Monitoring Well Driller, and 6 WV Transportation Engineering Technicians.

STATEMENT OF QUALIFICATIONS



TECHNICAL EXPERTISE

WETLANDS

POTESTA has a qualified staff of scientists and engineers who are trained and experienced in the identification and permitting of wetlands, the mitigation of displaced wetlands, and the design of constructed wetlands.

INVESTIGATION AND DELINEATION

Wetland investigations and delineations are conducted by POTESTA's scientists as part of pre-development site investigation and environmental impact assessments. During a wetland investigation, the site is examined for the presence of wetland indicators, including specific hydrology, soils and vegetation. Any wetlands discovered are delineated in accordance with the USACE Wetlands Delineation Manual (1987) and appropriate regional supplement manual (s).

PERMITTING

Once wetlands have been identified and delineated, POTESTA can prepare application packages for permits to fill and/or dredge these areas for further development. USACE is the agency responsible for granting wetland permits under Section 404 of the Clean Water Act. In addition to the USACE permit, individual states must approve each permit granted, certifying that it meets the state's water quality standards.

MITIGATION AND DESIGN

Wetland mitigation and design come into play when wetlands being displaced or filled are large enough to require mitigation under state and federal standards. In some cases, wetland mitigation can be achieved solely through the payment of a fee to a mitigation bank or fund, established for the creation, protection or enhancement of other wetland areas. In this case, POTESTA can prepare an appropriate mitigation offer and negotiate with state and federal authorities for its approval. Depending upon the availability of suitable sites, wetland mitigation can also consist of the actual design and construction of new wetlands, or the enhancement of existing wetlands.



STATEMENT OF QUALIFICATIONS

TECHNICAL EXPERTISE

BIOLOGICAL AND TOXICOLOGICAL SERVICES

Biological assessments and surveys are increasingly being used in both terrestrial and aquatic systems to develop regulations, monitor compliance, and indicate the effectiveness of environmental programs. Toxicological testing and biological monitoring are often included as permit requirements or used during negotiations. In many cases, biological assessments can be used to negotiate alternatives to permitting requirements or to satisfy regulatory agencies that no environmental damage is occurring. Biological and toxicological assessments may be used to demonstrate the success of endpoints in remediation, recovery, and restoration projects.

POTESTA offers a full range of biological and toxicological services to meet your needs:

- Biological Surveys and Rapid Bioassessments
- Variance Negotiations
- Industrial Site Remediation
- Toxicity Identification Evaluations
- Toxicity Reduction Evaluations
- Wetland Delineation and Remediation
- Stream Remediation and Restoration
- Endangered Species Surveys
- Environmental Risk Assessments
- Human Risk Assessments
- Natural Resource Damage Assessments
- Statistical Analysis and Database Management
- Pilot-Scale Testing and Treatability Studies
- Exotic Species Control/Management



STATEMENT OF QUALIFICATIONS



TECHNICAL EXPERTISE

ENDANGERED SPECIES CONSULTATION

POTESTA has extensive experience in biological assessments (BA) related to the Endangered Species Act. We utilize a combination of in-house professionals and recognized experts to complete projects for our clients. This arrangement allows us to provide a work product which is acceptable to the USFWS. We have established professional relationships with local and regional experts on projects in our region. These relationships allow us to have access to recognized experts on the appropriate species on an as-needed basis. The advantage to the client is that this approach allows us to select the best individual for the task at hand.



These experts have specialized in the study of their species of interest for many years and are familiar with the life cycle, habitat requirements, and sampling techniques for the species. POTESTA supplements these individuals with our experienced field staff, who are intimately familiar with the project, to constitute an effective team to respond quickly to threatened and endangered species issues. This team approach allows for a complete evaluation of the potential impact a project may have on a species of concern.

WATER QUALITY STUDIES

Water quality studies are being used more frequently to provide site-specific information used to establish attainable discharge limitations in National Pollutant Discharge Elimination System (NPDES) permits. In many cases, site-specific water studies can be used to demonstrate that discharges are not harming the aquatic environment.

POTESTA offers a full range of water quality study services to meet our clients' needs:

- Baseline Water Quality Sampling and Analysis
- Background Water Quality Sampling and Analysis
- Metals Translator Sampling and Analysis
- Water Chemistry Studies
- Mixing Zone Verification Sampling and Analysis

POTESTA employs scientists with backgrounds in aquatic ecology, fisheries, botany, wildlife science, and hydrology. This group of individuals has extensive experience conducting in-stream studies and is dedicated to appropriate data collection and analysis to meet the needs of our client in a correct, affordable and timely manner. Our senior staff members have long-term working relationships with regulatory agency personnel and are familiar with the particular requirements of the various types of studies conducted.



STATEMENT OF QUALIFICATIONS



TECHNICAL EXPERTISE

GEOGRAPHIC INFORMATION SYSTEMS APPLICATIONS

POTESTA provides comprehensive Geographic Information Systems (GIS) applications to generate reports and databases for projects that require a high level of visual interpretation and analysis. This technology manages information on soil, groundwater, utilities, property ownership, mining conditions, environmental contamination, topography, land use, and many other types of information, thus allowing the client to gather information about a parcel of land and make an informed decision.

POTESTA's GIS services include:

- Spatial Analysis
- Land Use Mapping
- Distance Analysis
- Geodatabase Management
- Site Design Analysis
- After the Fact Stream/Wetland Analysis
- Hydraulic Modeling and Floodplain Mapping
- Cartography and Map Production
- Geographic Positioning System (GPS) Field Data Collection
- Environmental Impact Statements and Risk Assessments
- Groundwater Investigations
- Site Remediation
- Natural Resource (Coal, Gas, Water, Etc.) Assessment Mapping
- Linear Projects (Highways, Water/Sewer Lines, Etc.)
- National Environmental Policy Act (NEPA)
- Rendering
- Viewshed Analysis
- Noise Studies
- Urban Planning
- Permitting

POTESTA uses GIS software, which includes the use of 3D Analyst and Spatial Analysis in ArcGIS to create and manage our datasets for a wide array of applications.

Using ArcGIS Spatial Analyst, POTESTA can build and analyze complex surfaces to identify patterns or features within datasets. Additionally, data can be derived to provide shaded relief, contours, angle of slope, aspect, hillshade, viewshed, curvature, and cut/fill data. Geostatistical interpolation methods are used to calculate the values of the fields. Spatial Analyst can also provide estimates of elevation, rainfall, temperature, groundwater, or noise.

The ArcGIS 3D Analyst allows the user to examine information from a 3-D perspective, making it possible to derive contours, slope and viewshed of a surface. Using ArcGIS 3D, you can view large sets of data in three dimensions from multiple viewpoints.



STATEMENT OF QUALIFICATIONS



TECHNICAL EXPERTISE

STREAM RESTORATION

POTESTA's professional staff of aquatic ecologists, aquatic biologists, and engineers who work collectively to complete various stream assessment and restoration projects for a variety of private and public sector clients. Services include habitat assessments, functional assessments, Rosgen and other stream classifications, watershed studies, hydraulic analyses, and conceptual, preliminary or detailed stream design. Our scientists and staff have worked with clients to provide very detailed stream restoration/rehabilitation plans that include in-stream structure/habitat improvements, channel realignment and/or bank stabilization, as well as less labor-intensive plans that may only require minor bank stabilization and buffer zone establishment.



POTESTA's stream restoration services include:

- Stream Habitat Assessment
- Channel Stability Evaluation
- Biological Studies/Monitoring
- Riparian Corridor/Watershed Assessment
- Preliminary/Conceptual Restoration Plans
- Detailed Restoration Plans
- Construction Plans
- Reference Reach Assessments
- Mitigation Feasibility Analysis
- Rosgen Classification
- Construction Monitoring
- Post Construction Monitoring and Reporting

PRELIMINARY STUDIES

Our experienced staff can evaluate sites suitable for stream restoration. The staff will not only evaluate physical habitat, both in-stream and within the riparian corridor, but an assessment of the existing water quality and biological community can be completed to provide a more holistic approach to reconnaissance efforts.

STREAM ASSESSMENT/CLASSIFICATION AND CONCEPTUAL DESIGN

Once a site has been identified, POTESTA's environmental staff can complete a more labor intensive site assessment and develop conceptual and preliminary plans. When completing stream restoration for mitigation or other regulatory requirements, it is POTESTA's philosophy that conceptual design is an important component in the overall process.

STREAM RESTORATION PLANS

POTESTA staff utilizes preliminary design concepts and field data to create stream restoration plans. These plans typically incorporate the necessary modeling which provides proposed channel dimensions. POTESTA provides detailed plan view and profile drawings which are sufficiently well-developed for regulator review.

CONSTRUCTION/POST CONSTRUCTION MONITORING

POTESTA recommends and is able to provide construction monitoring and further site assessments. Construction monitoring can help to ensure that the construction is completed according to the construction design and can facilitate quick resolution to unanticipated on-site conditions. POTESTA can provide post construction monitoring services, which include an evaluation of performance standards and reporting to the appropriate regulatory agency.

STATEMENT OF QUALIFICATIONS



TECHNICAL EXPERTISE

CIVIL ENGINEERING

POTESTA's engineering staff has a broad background related to the vast field of civil engineering, including utility/infrastructure design, dam/impoundment design, water/wastewater treatment, roadway design, development of grading plans, and storm water management. Our diverse staff of engineers, geologists, and scientists are routinely involved in these types of projects and work to support the project teams assigned to these projects on a daily basis to achieve a completed project that meets the client's expectations.

PRELIMINARY EVALUATIONS AND ANALYSES

- Phase I Environmental Site Assessments
- Floodplain Determination
- Geotechnical Explorations (Soil, Bedrock, and Groundwater Characterization)
- Foundation Recommendations
- Monitoring Well Systems and Site Characterization Plans
- Boundary, Topographical, and Photogrammetric Surveys
- Utility Planning
- Earthwork Evaluations (Volume Analysis)
- Opinion of Probable Costs/Engineer's Construction Cost Estimates

DESIGN SERVICES

- Erosion and Sediment Control Plans
- Earth Retaining Structures Design
- Geometric Site Layout
- Grading and Drainage Plans (Excavation and Fill Optimization)
- Access Road Design
- Hydraulic Structure Design
- Water and Sewer Design
- Slope Stability Analysis
- Subsurface Drainage System Design
- Construction Drawings, Specifications, and Contract Document Preparation



STATEMENT OF QUALIFICATIONS



TECHNICAL EXPERTISE

SURVEYING

POTESTA proposes to utilize our own survey crews for work on this project. POTESTA will perform all of the surveying required for this project using in-house personnel. We have three survey crews and the capability to add a fourth crew, if necessary. Our surveyors have worked on numerous site development, roadway and bridge construction, utility construction, and landfill development projects. POTESTA's surveyors use state-of-the-art equipment such as total station instruments, Trimble R-8 Glonass, RTK GPS Systems, AutoCAD, Autodesk Land Desktop and Autodesk Civil 3D design software, computer hardware for data management, and a Hewlett Packard color ink jet plotter.



POTESTA is equipped with modern surveying instruments allowing efficient data processing and accurate gathering of field information. Total station instruments equipped with data collectors are utilized for complete field to office automation allowing for high levels of productivity in the field. The latest versions of software are then used to process survey data and create drawings or required end products.

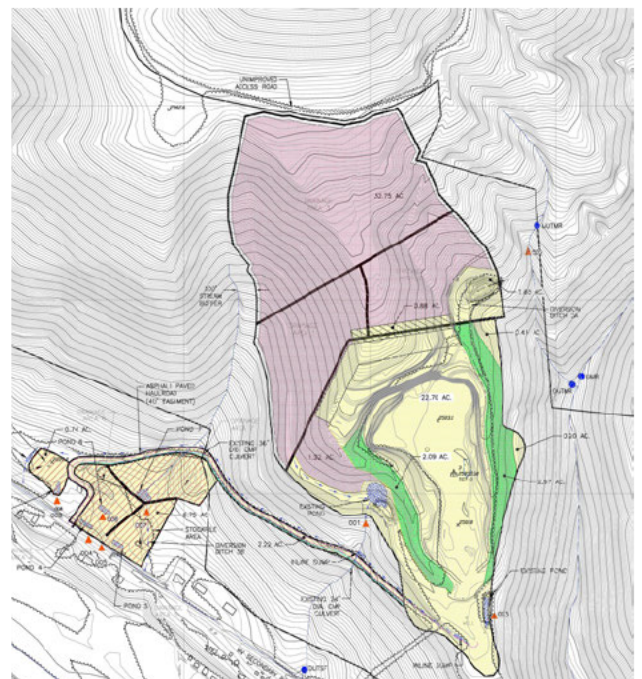
Small topographic mapping projects can be completed in-house using the aforementioned process. Larger projects are better suited for mapping using aerial photography. If necessary, POTESTA will provide the necessary surveying required for establishing ground control for aerial mapping in conjunction with our aerial mapping subcontractor. As a quality control measure, aerial mapping is field checked for accuracy by surveying cross sections or random points.

Surveys and mapping are completed to the standards as outlined by the National Map Standards as well as other applicable quality standards.

CADD

The CADD department utilizes the latest drafting/design software and computer hardware to maintain productivity at the high levels that clients demand and expect. We utilize Autodesk Civil 3D design software to prepare, revise, and manipulate drawings and engineering data efficiently. POTESTA's experienced and trained professionals allow clients' projects and assignments to be completed rapidly and at a reasonable cost.

- Surveying data manipulation—including development of topographic mapping; cross sections; profiles; isopach drawings; etc.
- Site design—including grading plans; drainage plans; utilities plans; right-of-way plans, etc.
- Roadway design
- Water; sanitary; sewer; electric; natural gas; and telecommunications design
- Permit drawings; maps; and exhibits
- Earthwork and planimetric quantity development
- Two and three dimensional graphics

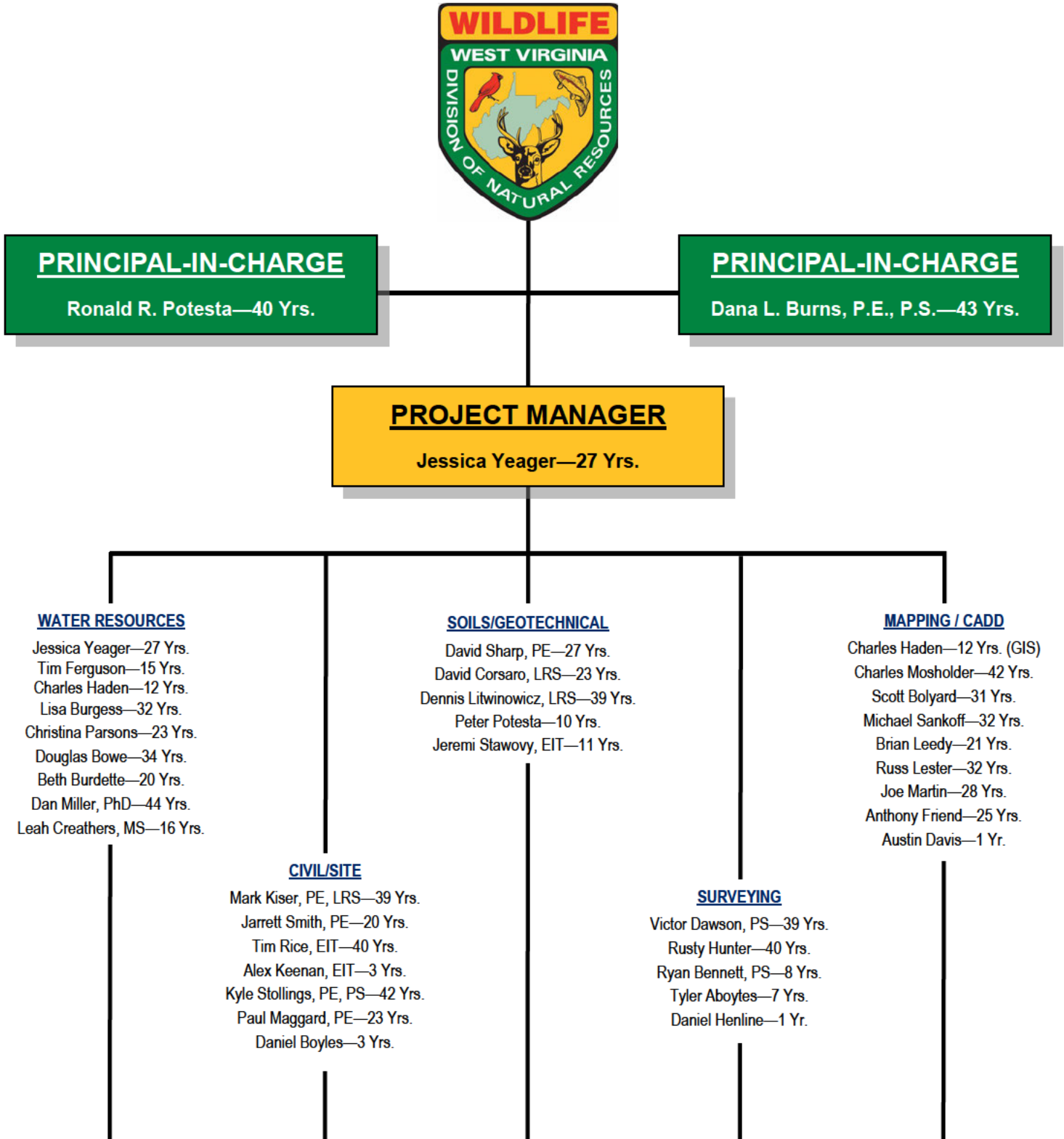


STATEMENT OF QUALIFICATIONS

STAFFING PLAN



PROJECT TEAM ORGANIZATIONAL CHART



STATEMENT OF QUALIFICATIONS



STAFF QUALIFICATIONS

KEY PERSONNEL

Services will be performed at POTESta's Charleston, West Virginia office. We stand ready to commit the personnel and resources required to complete this project in a timely, technically sound, and cost-efficient manner. Current workload is such that we can immediately provide personnel—POTESta's large staff size will allow us to work on this project on an accelerated schedule, if necessary.

Resumes of key personnel and staff certifications are located in **Appendix A**.

Mr. Ronald Potesta's, President, key technical responsibilities include the management of air and water projects and technical liaison for complex environmental compliance issues. Mr. Potesta served as the Director and Deputy Director of WVDNR which, during his tenure, included the supervision of Water Resource and Waste Management Division, Land and Real Estate Office, Office of Regulatory Affairs, Conservation Education and Litter Control, and Public Information Office. Mr. Potesta will provide technical guidance to the project team as needed.

Mr. Potesta's current and past service on boards and commissions include:

- Past Chairman and current Commissioner—Ohio River Valley Water Sanitation Commission
- Past Chairman and current Board Member—The West Virginia Nature Conservancy
- Board of Directors Member—West Virginia Land and Mineral Owners
- Past Chairman—The Greater Kanawha Valley Foundation

Mr. Dana L. Burns, P.E., P.S., Vice President, has served as the Principal-in-Charge for all of POTESta's contracts for engineering services with the State of West Virginia, including those with the WVDNR, WVDOH, WVDOH, and West Virginia Department of Health and Human Resources. As such, he understands the resources it takes to complete a project for the State, as well as the requirements of not just the purchasing agency, but also those of the West Virginia Department of Administration.

Mr. Burns' experience include:

- Over 43 years of civil and environmental engineering and related projects
- Completing 100+ water supply projects
- 50+ liner system projects
- Numerous sampling/flow metering projects

Ms. Jessica Yeager, Senior Scientist, is an aquatic biologist and toxicologist with 27 years of experience in evaluating the effects of anthropogenic activities on aquatic communities. She is a certified wetland soil scientist, botanist, and hydrologist with field experience in West Virginia, Kentucky, and Virginia. Ms. Yeager is also a recognized forensic delineation professional.

Ms. Yeager's professional experience includes:

- Review and preparation of environmental permitting, environmental assessments, biological assessments, and other environmental impact studies
- Proficiency in incorporation of GIS in project development
- T&E and SHPO coordination/consultation
- Developing of impact assessments for planned disturbances and accidental releases
- Establishing and implementing recovery plans for streams and rivers

STATEMENT OF QUALIFICATIONS



STAFF QUALIFICATIONS

KEY PERSONNEL

Mr. Timothy Ferguson, M.S., Senior Scientist, will serve as an additional point of contact for this project. Mr. Ferguson has 15 years' experience in environmental compliance and permitting including field reconnaissance, assessment, and report writing and has served as project manager for numerous projects. He is formally trained in the use of the 1987 USACE Wetland Delineation Manual from Ohio State University in 2008 and has been utilizing the Eastern Mountains and Piedmont Regional Supplement since its issuance.

His specialties include:

- Stream and wetland identification and delineation and mitigation development and planning
- Permitting with the following agencies: USACE, WVDEP, WVDNR, SHPO, USFWS, and USEPA
- Collection, identification, and analysis of research data via habitat, electrofishing surveys, water sampling, and chemistry analysis

Mr. D. Mark Kiser, P.E., L.R.S., Chief Engineer, has over 39 years' experience in civil engineering, with particular emphasis on design and construction administration. Mr. Kiser has successfully managed various design and construction projects totaling tens of millions of dollars. He will provide quality assurance/quality control via a "constructability" review.

Mr. Kiser's specific activities relating to projects include:

- Conceptual site development plans
- Engineering construction cost estimates
- Roadway design
- Site grading plans
- Pavement designs
- Stormwater Management Plan development
- Utility design
- Constructability reviews
- Preparation of contract documents
- Pre-bid meetings and bid evaluations
- Construction management/administration

Mr. Charles Haden, Staff Scientist, will serve as the **GIS Analyst** for this project and will also provide support and assistance in field reconnaissance. Mr. Haden has 12 years' experience in environmental compliance and permitting and has served as the GIS analyst for numerous projects.

He specializes in mapping related to:

- Stream and wetland identification and delineation
- Geodatabase management
- GIS desktop analysis for planning and permitting

STATEMENT OF QUALIFICATIONS



PROJECT AND GOALS

PROJECT APPROACH

This clear plan has been used in past projects that met the owner's and project budget, as well as the project constructed in the time allotted in the contract documents.

GOAL/OBJECTIVE 1: REVIEW EXISTING PLANS—COMMUNICATE WITH OWNER

- Once the contract is awarded, POTESta will visit the site to gather additional information and have dialogue with WVDNR personnel. From this effort, we anticipate preparing our detailed scope of services.
- POTESta will work with WVDNR to develop a successful team approach to the project.
- Throughout the length of the project, POTESta will attend public meetings and hearings, including preparing documents and presentation materials, as needed.

GOAL/OBJECTIVE 2: DESIGN SERVICES

Field Work:

- POTESta proposes to utilize our own survey crews on this project.
- POTESta's environmental field crews will catalog and delineate the existing aquatic resources on the site that may require permitting, mitigation, and/or protection during construction.

Preliminary Site Design:

- Based on the site conditions, limitations, and information (e.g., survey elevation data, flood plain boundaries, existing site drainage features) gathered by POTESta, our team will develop a plan for the wetland creation that executes WVDNR's vision and develop preliminary plans for the WVDNR to review and make comments.
- The design can be flexible and POTESta will adjust the design accordingly as the situation and/or funding may dictate.

Permitting:

- POTESta is one of West Virginia's preeminent environmental consulting firms. Our relationship with regulatory agency staff and familiarity with their procedures will allow us to efficiently prepare the various permit approvals needed for the construction of this project.
- Following WVDNR's approval of the preliminary site design, POTESta will proceed with preparing the required permit applications for this project.

Final Design:

- Following agency review and comment period, POTESta will implement required changes and prepare the project for final design.
- Construction drawings and specifications will be prepared and submitted to WVDNR to review and approve prior to advertisement and bidding.
- POTESta will prepare a preliminary opinion of probable construction cost broken down by major work items.
- The preliminary opinion of probable construction cost will be submitted with the draft submittal of the drawings and specifications.
- A final opinion of probable construction cost will be prepared and submitted with the draft drawings.

STATEMENT OF QUALIFICATIONS



PROJECT AND GOALS

PROJECT APPROACH

GOAL/OBJECTIVE 3: CONSTRUCTION CONTRACT ADMINISTRATION SERVICES

POTESTA provides construction monitoring and construction administration services to assist clients in achieving regulatory and contractual compliance, document that contractor activities are in compliance with design requirements, and to serve as an extension of our client.

Daily Construction Monitoring:

- Documentation of daily construction observation activities on POTESTA's standard Daily Log Forms, including pertinent information such as personnel and equipment onsite, equipment in use, inspection details/results, weather conditions, etc.
- Daily photos will be taken during the progression of the construction sequence to document the construction and a written summary of observed daily work activities including site progress meetings will be submitted to client.

Construction Contract Administration:

- Review contract documents, particularly items that were not prepared by POTESTA.
- Review, meet, comment on and accept contractor's preliminary (and subsequent adjustments to) progress schedule, preliminary schedule of shop drawing and sample submittals, and preliminary schedule of values (for progress payments).
- Attend pre-construction conference, progress meetings, and other meetings as needed.
- Review underground facilities not shown on contract documents.
- Review and approve shop drawings and samples.
- Review substitutes and "or equal" items, and issue written acceptance/denials.
- Review contractor work plan, if required by specification special conditions.
- Issue written clarifications or interpretations of the requirements of the contract documents.
- Prepare weekly reports summarizing construction activities.
- Prepare change orders for the work.
- Review contractor invoices and issue written recommendations for payment or denial.
- Issue Certificate of Substantial Completion, as typically required by the contract documents.
- Provide record drawings showing "as-built" features.



STATEMENT OF QUALIFICATIONS



PROJECT MANAGEMENT

COMMUNICATION WITH OWNER

PRINCIPAL-IN-CHARGE

- Responsible for contract management (administration) and shall coordinate and direct all aspects of the project.
- Review the proposed project and assist the Project Manager to assemble a project team and the necessary resources.
- The Principal-in-Charge and Project Manager will visit the site with WVDNR to review site conditions and the proposed services to be completed and guide the preparation of a detailed proposal and cost estimate.
- Review the project budget and schedule during performance of the project.
- Provide a final QA/QC review of the documents prior to submittal to WVDNR.

PROJECT MANAGER

- Prepare a written proposal including a detailed scope of work and an associated manhour and cost estimate submitted to WVDNR for review.
- Review the proposal with WVDNR including a task-by-task discussion of work items and the related costs. Upon WVDNR's approval of the proposal, the Project Manager will arrange for the start of project activities.
- Develop a detailed step by step project work plan so that the project activities are completed in a correct manner, within budget, and on time.
- Supervise and direct day-to-day project activities for this project.
- Review work products at intermediate points and prior to project completion and submittal to WVDNR.
- Conduct project status reports which may include weekly meetings, memos, or telephone calls with the WVDNR Project Manager, as required.

PROJECT TEAM

- POTESTA will utilize the appropriate classification of staff to conduct activities required for the project.
- Our large, experienced staff allows us to respond quickly, provides flexibility, and will provide for the opportunity of high-level input from in house experts on complex multi-disciplinary projects.
- Our normal method of staffing projects is to assign a small project team with total responsibility for completion of the work to the client's satisfaction and budget.



STATEMENT OF QUALIFICATIONS



PROJECT MANAGEMENT

PROJECT SCHEDULE CONTROL

Direct responsibility for schedule control lies with the Project Manager:

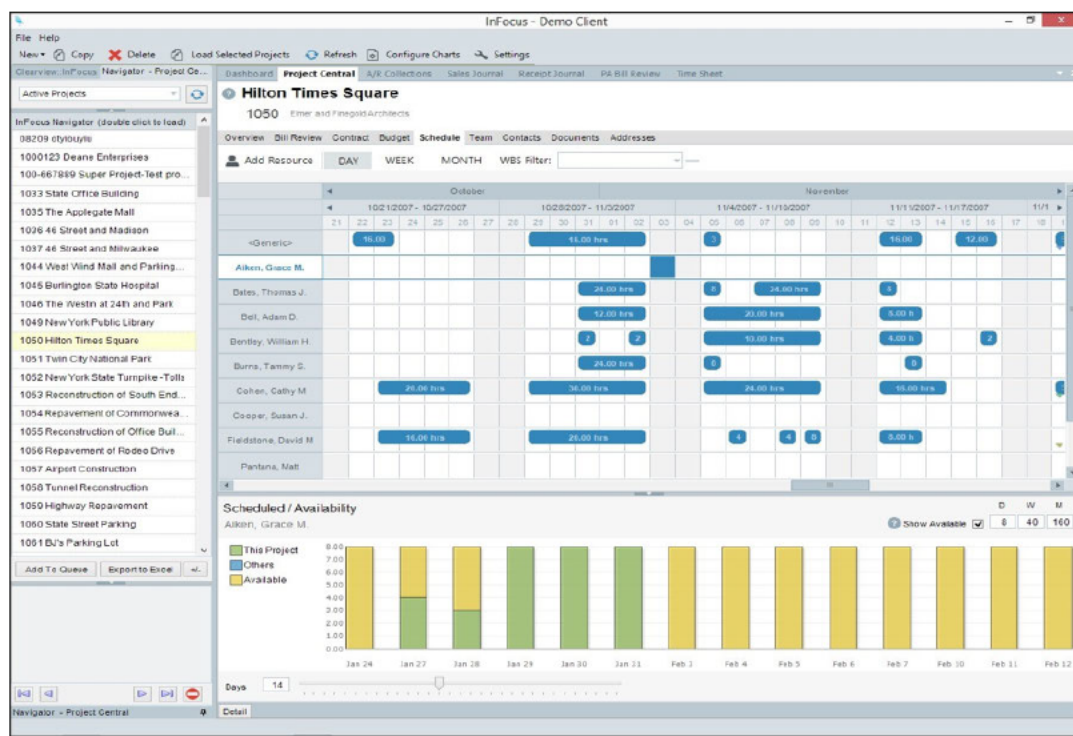
- Initially, the Project Manager reviews schedule requirements to see how they can be achieved given the anticipated scope of work.
- The Project Manager monitors the progress and compares it with the established schedule on a weekly basis, while keeping the Principal-in-Charge aware of the schedule's status.
- The Principal-in-Charge can make staff adjustments to allow the Project Manager to maintain the project schedule.
- If circumstances develop that make it impossible to maintain the project schedule, the Project Manager contacts the Client to develop a mutually acceptable adjustment to the schedule and/or work plan.

PROJECT COST CONTROL

INVOICING AND BILLING

POTESTA uses InFocus software, a cloud-based accounting system that makes it easy to keep track of all invoicing and billing transactions. The software also features project management, customer relationship management, and reporting. InFocus software includes real-time tracking of projects automatically, including time and expense, milestones, and vendors/subcontractors. This software easily allows information to be readily available for project updates to our clients, communication by team members and subcontractors.

Our experience with WVDNR projects makes POTESTA familiar with the process for contractor payment applications, distribution of payment, and the final inspection process. This will ensure that all parties are kept informed and satisfied throughout the construction phase.



STATEMENT OF QUALIFICATIONS



PROJECT MANAGEMENT

PROJECT COST CONTROL

RESPONSIBILITY OF BUDGET

POTESTA takes pride in our ability to provide our clients with innovative and concise engineering design packages that allow more of our the client's money spent on actual construction rather than engineering design fees. The Project Manager is responsible for monitoring the project budget and keeping the Principal-in-Charge informed of the status. The Project Manager develops a work plan based on hourly rates and tasks to complete the project.

QUALITY CONTROL/ASSURANCE

DELIVERABLES

The Project Manager will work with the Principal-in-Charge, as well as each team lead, to understand the level of detail and expectations for this project. POTESTA has a written quality assurance program encompassing drafting, engineer design, and written documents that utilizes standardized Quality Assurance/Quality Control (QA/QC) practices such as consistency checks, color coding of checked copies/calculations, and review of method of measurements versus quantity tallies to meet QA/QC expectations. Included are training for new staff members on company procedures, and color-coded checking systems for drafting and calculations, consistency checks (e.g. specifications versus drawings).

We utilize peer review of deliverable documents, secretarial review, constructability reviews of drawings, and review of method of measurements versus quantity tallies, all to make sure QA/QC expectations are met. As a standard quality assurance practice, the Project Manager and the Principal-in-Charge will review and comment on materials prior to submission to the client. Furthermore, POTESTA is a member of ASFE, an organization that emphasizes professional practices to reduce loss liability.

Concept Item	CADD Designer	Engineer No. 1	Engineer No. 2	Project Manager	Principal-in-Charge
Tax Maps	X	O			
Utilities	X	O			
Calculations		X	O	O	
Quantities/Cost Estimate		X	O	O	
Preliminary Design	X	O		O	
Drawings/Site Plans	X	X / O		O	O
Specifications		X		O	
Overall QA/QC				X	O
Permit Applications		X	O	O	
Post-Drawing Field Review and Constructability Review				O	
Client Communication		X		X	X
Consistency				X	O

X=COMPLETE O=CHECK

PAST PROJECTS



COBUN DAM NO. 2 MITIGATION SITE

*Morgantown Utility Board
Preston County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Morgantown Utility Board (MUB) to establish a mitigation site for the Cobun Creek Dam No. 2 located in Monongalia County, West Virginia on approximately 23 acres of privately owned property in Preston County, West Virginia. The project scope included wetland creation, restoration, enhancement, and preservation. The mitigation site sat in a bowl-like valley bottom that exhibited frost pocket conditions like those found in the Canaan Valley National Wildlife Refuge Area in Tucker County, West Virginia. A meandering low gradient channel runs through the project area that drains a watershed of approximately 2.0 miles similar to Yellow Creek in Tucker County, West Virginia which was used as a reference.



The mitigation project for MUB was completed in 2021 and the first year of monitoring was completed in late summer of 2022:

- Post construction monitoring in herbaceous plots indicate that there are at least 24 obligate and 30 facultative wet plant species present.
- All the sites have achieved 100 percent cover in this short timeframe, and some have even achieved the species count required at the end of the 10-year timeframe.
- It is anticipated that over time, the wetland will evolve into a scrub-shrub wetland with multiple species and ample cover.



PAST PROJECTS



WETLAND RESTORATION

Freeland & Kauffman, Inc.

Frozencamp Wildlife Management Area, Jackson County, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Freeland & Kauffman, Inc. to provide professional environmental consulting services for Wal-Mart Stores, Inc. for a new Supercenter facility in Ripley, West Virginia. The project required both a Department of Army permit from the United States Army Corps of Engineers and individual water quality State 401 certification from the West Virginia Department of Environmental Protection. POTESTA prepared a Compensatory Mitigation Plan for both stream and wetland impacts. The wetland mitigation was completed in the Frozencamp Wildlife Management Area (FCWMA).



POTESTA designed an approximate 2.5-acre emergent/scrub-shrub wetland east of Wiblin Lake. This was accomplished regrading and roughening the bottom of Wiblin Lake to lower the water table depth between approximately 6 and 18 inches to provide retention and sediment storage in the wetlands. Wetland sumps and swaths were developed to maximize habitat regimes and were fueled by neighboring tributaries that had their banks lowered in portions to allow water to escape during high flow events to feed the wetland area.



The wetland vegetative planting plan included *Cephalanthus occidentalis* (button bush), and *Alnus rugosa* (speckled alder) shrubs to be planted at a rate of approximately one stem for every 10 linear feet at random along the edges of the wetland swaths. Wetland seed mixes were comprised of natural occurring and fast establishing species including, but not limited to, *Elymus virginicus* (Virginia Wild Rye), *Carex vulpinoidea* (Fox Sedge), and *Juncus effusus* (Soft Rush) at a rate of 15 bulk pounds per acre. Upland planting plans were established using existing and surrounding site conditions. *Quercus*

bicolor (swamp white oak) and *Quercus palustris* (pin oak) tree species were selected for the riparian corridor and planted with an on center spacing of 15 to 20 feet. An upland seed mix was established for the disturbed upland areas during construction and included separate species compositions based on the time of year. Upland seed mixes were applied at a rate of 9 bulk pounds per acre.

PAST PROJECTS



WETLAND DELINEATION AND PERMITTING WIND TURBINE PROJECT

*Invenergy, LLC
Beech Ridge Wind Farm
Greenbrier County, West Virginia*

Potesta & Associates, Inc. (POTESTA) visits the site and conducts evaluations to identify and delineate the boundaries of jurisdictional waters, including wetlands, located within the survey area. The evaluation is performed in accordance with methods described in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987). POTESTA also utilizes the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* for this project.

Jurisdictional streams are delineated utilizing the “bed-and-bank” method, as well as the West Virginia Department of Environmental Protection’s (WVDEP) October 1999 Memorandum, *Guidance for Delineation of Ephemeral/Intermittent Streams*. Ephemeral streams are defined as those that flow in direct response to precipitation, while intermittent streams flow for only a portion of the year. Perennial streams flow year round. During the initial site visit, a Trimble, sub-foot global positioning system (GPS) is used to locate the wetland and stream boundaries. This information is then transferred to project mapping.

Available information and data regarding the site is compiled and reviewed prior to conducting the on-site evaluation. The following resources are utilized in the investigation:

- Natural Resources Conservation Service – County Soil Surveys
- U.S. Geological Survey 7.5 Minute Topographic Quadrangles
- National Wetlands Inventory Mapping
- Aerial Mapping



STATEMENT OF QUALIFICATIONS

PAST PROJECTS



WETLAND DELINEATION AND PERMITTING WIND TURBINE PROJECT PAGE 2

Vegetation, soils, and hydrology at potential wetland areas on the property are evaluated and the resulting information recorded on data forms. Dominant vegetation of the canopy, understory, vines, and herbaceous ground cover at potential wetland areas are identified and classified according to the *National List of Plant Species that Occur in Northeast Region*. Hydrologic characteristics are also observed and soil samples obtained with a sharp-shooter shovel at potential wetland areas. Soil samples are examined and described in accordance with the colors and alphanumeric notations found in *Munsell Soil Color Charts* (1990). Jurisdictional wetlands identified within the subject area are flagged in the field for surveying and verification purposes.

POTESTA prepares a Stream and Wetland Investigation and Delineation Report for the site. The report included the location, classification, and size of jurisdictional wetlands identified; a description of vegetation, soils, and hydrology of potential wetland areas. GPS data is downloaded and imported into ArcGIS for development of mapping. Mapping, showing the boundaries of jurisdictional wetlands and streams, is provided for the delineation report. This information is provided so that it can be utilized for permitting purposes.

POTESTA compiled a list of permits/approvals which are believed to be necessary for the project. We maintain that list throughout our involvement and update it as appropriate. The permits or approvals which may be necessary if the area of disturbance is located within a delineated stream or wetland are as follows:

- US Army Corps of Engineers (USACE) Permit, Section 404 Clean Water Act
- State of West Virginia, Water Quality Certification, Section 401 Clean Water Act
- West Virginia Division of Natural Resources Office of Land and Streams (WVDNR OLS), Stream Activity Permit
- Section 7 Consultation (T&E Species)
- Section 106 Consultation (Cultural Resources)

PAST PROJECTS



ENVIRONMENTAL CONSULTING SERVICES FOR NATURAL GAS

***EQT Production Company and EQT Gathering LLC
Ritchie, Wetzel, Lewis, Upshur, Marion, Monongalia, Harrison, Tyler, Tyler, and
Doddridge Counties, West Virginia***

Potesta & Associates, Inc. (POTESTA) visited over 200 sites to conduct evaluations to identify and delineate the boundaries of jurisdictional waters, including wetlands. Projects included well sites, well lines, and gathering lines. The evaluation was performed in accordance with methods described in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987). POTESTA also utilized the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* for this project.



Jurisdictional streams were delineated utilizing the “bed-and-bank” method, as well as the West Virginia Department of Environmental Protection’s (WVDEP) October 1999 Memorandum, *Guidance for Delineation of Ephemeral/Intermittent Streams*. Ephemeral streams are defined as those that flow in direct response to precipitation, while intermittent streams flow for only a portion of the year. Perennial streams flow year round. During the initial site visit, a Trimble, Geox H6000 sub-foot global positioning system (GPS) was used to locate the wetland and stream boundaries. This information was transferred to project mapping.

Available information and data regarding the sites were compiled and reviewed prior to conducting the on-site evaluation. The following resources were utilized in the evaluation:

- Natural Resources Conservation Service – County Soil Surveys
- U.S. Geological Survey 7.5 Minute Topographic Quadrangles
- National Wetlands Inventory Mapping



PAST PROJECTS

ENVIRONMENTAL CONSULTING
SERVICES FOR NATURAL GAS
PAGE 2

- Aerial Mapping

Vegetation, soils, and hydrology at potential wetland areas on the property were evaluated and the resulting information recorded on data forms. Dominant vegetation of the canopy, understory, vines, and herbaceous ground cover at potential wetland areas were identified utilizing field guides and classified according current version of the USACE National Wetland Plant List for the region. Hydrologic characteristics were also observed and soil samples obtained with a sharp-shooter shovel at potential wetland areas. Soil samples were examined and described in accordance with the colors and alphanumeric notations found in Munsell Soil Color Charts (2000). Jurisdictional wetlands identified within the subject areas were flagged in the field for surveying and verification purposes.

POTESTA prepared Stream and Wetland Investigation and Delineation Reports for each site. The report included the location, classification, and size of jurisdictional wetlands identified; a description of vegetation, soils, and hydrology of potential wetland areas. GPS data was downloaded and imported into ArcGIS for development of mapping. Mapping, showing the boundaries of jurisdictional wetlands and streams, was provided for the delineation report so that it could be utilized for permitting purposes.

PAST PROJECTS



WETLAND DELINEATION AND PERMITTING FOR NATURAL GAS SITES

Antero Resources
Doddridge and Harrison Counties, West Virginia

Potesta & Associates, Inc. (POTESTA) visited each site and conducted evaluations to identify and delineate the boundaries of jurisdictional waters, including wetlands, located within the survey area. Evaluations were performed in accordance with methods described in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987). POTESTA also utilized the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* for this project. POTESTA visited and delineated jurisdictional waters at approximately 50 sites in West Virginia.

Jurisdictional streams were delineated utilizing the “bed-and-bank” method, as well as the West Virginia Department of Environmental Protection’s (WVDEP) October 1999 Memorandum, *Guidance for Delineation of Ephemeral/Intermittent Streams*. Ephemeral streams are defined as those that flow in direct response to precipitation, while intermittent streams flow for only a portion of the year. Perennial streams flow year round. During the site visit, a Trimble, sub-foot global positioning system (GPS) was used to locate the wetland and stream boundaries. This information was subsequently transferred to project mapping.

Available information and data regarding each site were compiled and reviewed prior to conducting onsite evaluations. The following resources were utilized during the investigation:

- Natural Resources Conservation Service – County Soil Surveys
- U.S. Geological Survey 7.5 Minute Topographic Quadrangles
- National Wetlands Inventory Mapping
- Aerial Mapping



Vegetation, soils, and hydrology at potential wetland areas on the property were evaluated and the resulting information recorded on data forms. Dominant vegetation of the canopy, understory, vines,



PAST PROJECTS

WETLAND DELINEATION AND PERMITTING FOR NATURAL GAS SITES PAGE 2

and herbaceous ground cover at potential wetland areas were identified and classified according to the *National List of Plant Species that Occur in Northeast Region*. Hydrologic characteristics were also observed and soil samples obtained with a sharp-shooter shovel at potential wetland areas. Soil samples were examined and described in accordance with the colors and alphanumeric notations found in Munsell Soil Color Charts (1990). Jurisdictional wetlands identified within the subject area were flagged in the field for surveying and verification purposes.

POTESTA prepared a Stream and Wetland Investigation and Delineation Report for each site. The report included the location, classification, and size of jurisdictional wetlands identified, and a description of vegetation, soils, and hydrology of potential wetland areas. GPS data was downloaded and imported into ArcGIS for development of mapping. Mapping, showing the boundaries of jurisdictional wetlands and streams, was provided for each delineation report so that it could be utilized for permitting purposes.

POTESTA compiled a list of permits/approvals believed to be necessary for the project. The permits or approvals necessary typically included:

- US Army Corps of Engineers (USACE) Permit, Section 404 Clean Water Act
- State of West Virginia, Water Quality Certification, Section 401 Clean Water Act
- West Virginia Public Land Corporation (PLC) approval, for Stream Bed Work
- Section 7 Consultation (T&E Species)
- Section 106 Consultation (Cultural Resources)

PAST PROJECTS



FORENSIC STREAM/WETLAND DELINEATION AND AGENCY NEGOTIATIONS

Babst, Calland, Clements, and Zomnir, P.C.
Doddridge, Marshall and Wetzel Counties, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Babst, Calland, Clements, and Zomnir, P.C. to forensically delineate and evaluate potential impacts to “waters of the United States” as per Order for Compliance (the Orders) from the United States Environmental Protection Agency (USEPA). These projects were located at multiple locations in Doddridge, Marshall, and Wetzel counties, West Virginia. The Orders from the USEPA indicated that discharges (into “waters of the U.S.”) had occurred and after-the-fact delineation of the locations was required. The work, completed without authorization from the United States Army Corps of Engineers (USACE), included the filling of wetlands and streams at well pads, impoundments, road crossings and pipeline crossings. POTESTA developed preliminary jurisdictional determination documents identifying potential impacts to stream and wetlands and worked with the USEPA to negotiate impacts (jurisdiction). The alleged violations at over more than a half-dozen sites impacted approximately 13,000 linear feet of stream and 1.329 acres of wetlands.



As part of a final delineation impact statement, POTESTA prepared an identification and classification of aquatic resources that included pre-construction and post-construction configurations. Other information included in the final report was watershed information, rain/stream gauge data, soil data, spatial analysis, 3D analysis, and historical aerial mapping analysis to demonstrate the limits of potential jurisdiction and verify current field conditions. In addition, extensive field work was used to verify potential wetland and stream configuration. POTESTA utilized extensive geospatial review, literature review, and professional experience to develop defensible pre-construction configurations so that impacts assessments were negotiable.

POTESTA also participated in several meetings with the USEPA to help to develop the consent decree for the impact sites. Conceptual mitigation assessments were prepared concurrently to assist in final mitigation requirements. Impoundment removal cost estimates were generated so that a comparison could be made between all of the mitigation options available (and was required by the

STATEMENT OF QUALIFICATIONS

PAST PROJECTS



FORENSIC STREAM/WETLAND DELINEATION
AND AGENCY NEGOTIATIONS
PAGE 2

USEPA). As required, POTESta provided multiple conceptual mitigations approaches for each project, while concurrently negotiating the final impact determination.

Services provided by POTESta also included conceptual restoration plans, Stream Wetland Valuation Metric and Hydrogeomorphic Assessments, and benthic sampling to develop baseline and post stream restoration credits and debits as determined by conceptual metrics.



STATEMENT OF QUALIFICATIONS

PAST PROJECTS



TRANS-ALLEGHENY INTERSTATE LINE

*Power Engineers, Inc.
Pennsylvania, West Virginia and Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Trans-Allegheny Interstate Line Company (TrAILCo) to provide environmental consulting services for the location and construction of high voltage electric transmission lines and related facilities. TrAILCo constructed a 500 kilovolt (kV) substation in Grant County, West Virginia (Mt. Storm Substation), a 500 kV substation in Frederick County, Virginia (Meadow Brook Substation), a new 500 kV transmission line from the Pennsylvania State line south through Monongalia, Preston, Tucker, and Grant counties to the Mt. Storm substation and further through Hardy and Hampshire counties, West Virginia and Frederick County, Virginia connecting to the Meadow Brook substation. The right-of-way (ROW) was 200 feet wide and traversed from Mt. Morris, Pennsylvania to Front Royal, Virginia for approximately 195 miles.

Specific services provided by POTESTA included:

- Wetland delineation of 200-foot right-of-way for approximately 195 miles.
- Completed delineations and permitting for multiple substations along the project route.
- Completed delineations and permitting for various laydown yards for construction plans.
- Monitored construction activities including access road and structure locations in addition to restoration activities.



PAST PROJECTS



SNOWCREEK WETLAND DELINEATION, MITIGATION PLAN, AND PERMITTING

SnowCreek Properties, LLC
Snoeshoe, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by SnowCreek Properties, LLC to conduct wetland and stream delineation services in conjunction with a proposed commercial development. POTESTA prepared a compensatory mitigation plan that included on-site stream restoration and established funding for a portion of the Knapps Creek Stream Restoration project with the Greenbrier Valley Conservation District. The compensatory stream mitigation consisted of approximately 1,000 linear feet of new stream channel and approximately 2,000 linear feet of localized tree and shrub plantings along the banks of the newly formed stream channel.

In addition, POTESTA prepared and applied for the necessary permits dealing with this type of project. This included Section (of the Clean Water Act) 404 and 401 Individual Permits from the US Army Corps of Engineers and West Virginia Department of Environmental Protection. SnowCreek Properties has received their permits.



PAST PROJECTS



WETLAND INVESTIGATION/DELINEATION

Renick Williams

Moorefield, Hardy County, West Virginia

Potesta & Associates, Inc. (POTESTA) conducted a wetland investigation/delineation to ascertain the presence and to delineate the boundaries of jurisdictional wetlands that may be present on the subject property located north of Moorefield, Hardy County, West Virginia. The subject property was approximately 27 acres in size.

The methods utilized in this investigation followed *United States Army Corps of Engineers' Wetlands Delineation Manual* (1987) for a routine onsite inspection. The project area and its boundaries were physically walked to determine vegetation change and soil saturation. Additionally, the wetland and upland areas are clearly distinct. The transect wetland determination method is typically used in determining wetland boundaries on tracts of land of this size. However, POTESTA used the routine method to more accurately determine the wetland boundaries.

Vegetation was identified in accordance with the taxonomic keys and nomenclature set forth in Strausbaugh and Core, *Flora of West Virginia* (1977) and classified using the United States Fish and Wildlife Service's *National List of Plant Species That Occur in Wetlands: Northeast (Region 1)*.

Hydrological characteristics of the area were noted and recorded. Soil saturation was measured and documented where applicable. Soil samples were obtained using a sharp shooter shovel. Soil test pit locations were established and soil characteristics were recorded.

Approximately 18.11 acres of jurisdictional wetland were delineated on the subject property. The U. S. Army Corps of Engineers and the Natural Resource Conservation Agency reviewed and agreed with the delineation performed by POTESTA.



STATEMENT OF QUALIFICATIONS



REFERENCES

EDF RENEWABLES—WIND HILL SOLAR

Chris Sternhagen
(612) 486-4513

POTESTA is currently retained to provide engineering, regulatory, and environmental support services in support of the Round Hill Solar Project in Charles Town, Jefferson County, West Virginia. Various services include regulatory liaison services, Phase I Environmental Site Assessment, Spill Prevention Countermeasures and Control Plan, Clean Water Act—Section 404 Permitting, NEPA, PSC of West Virginia Siting Certificate, WVDEP—Section 401 Water Quality Certification, WVDEP—Construction Stormwater Permitting, WVDNR Office of Land and Streams—Stream Activity Application, WVDNR—Natural Heritage Database, and local permitting requirements.

CHEMOURS (PREVIOUSLY DUPONT)—VOLUNTARY REMEDIATION AND REDEVELOPMENT

Sathya Yalvigi
(302) 773-4291

POTESTA was retained to serve as Project Manager and LRS with the assessment of a 110-acre zinc smelting site located in Harrison County, West Virginia, and entering it into the West Virginia VRRRA program. This was the largest VRRRA site in West Virginia. Portions of the site contained abandoned mine portals that were reclaimed as part of the remediation design. The site contains a 50-acre coal/zinc tailings pile located adjacent to the West Fork River. The pile is estimated to contain 2.2 million cubic yards of tailings with lead, copper, zinc, mercury and other metals. Specific tasks included land use planning and site redevelopment plan, development of the voluntary remediation agreement, preparation of site assessment work plan, oversight during site characterization/implementation and preparation of Environmental Site Assessment Report, demolition and asbestos abatement, and oversight during implementation of remediation work plan.

CITY OF SOUTH CHARLESTON—PARK PLACE DEVELOPMENT

Steve DeBarr, PE
(304) 768-4140

POTESTA is currently retained to serve as Engineer-of-Record for the site development of a 500,000 square feet of retail, entertainment, food, and beverage development. POTESTA was also retained to dewater and fill the fly ash impoundment.



STATEMENT OF QUALIFICATIONS

VENDOR CERTIFICATES

CERTIFICATE OF INSURANCE



CERTIFICATE OF LIABILITY INSURANCE

POTE&AS-01

NGONZALEZ

DATE (MM/DD/YYYY)
3/8/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Ames & Gough 8300 Greensboro Drive Suite 980 McLean, VA 22102		CONTACT NAME: PHONE (A/C, No, Ext): (703) 827-2277 FAX (A/C, No): (703) 827-2279 E-MAIL: admin@amesgough.com ADDRESS:															
INSURED Potesta & Associates, Inc. 7012 MacCorkle Avenue, SE Charleston, WV 25304		<table border="1"> <thead> <tr> <th>INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A : Valley Forge Insurance Company A(XV)</td> <td>20508</td> </tr> <tr> <td>INSURER B : Continental Insurance Company A(XV)</td> <td>35289</td> </tr> <tr> <td>INSURER C : National Fire Insurance Company of Hartford A(XV)</td> <td>20478</td> </tr> <tr> <td>INSURER D : Evanston Insurance Company</td> <td>35378</td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </tbody> </table>		INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Valley Forge Insurance Company A(XV)	20508	INSURER B : Continental Insurance Company A(XV)	35289	INSURER C : National Fire Insurance Company of Hartford A(XV)	20478	INSURER D : Evanston Insurance Company	35378	INSURER E :		INSURER F :	
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COVERAGES	CERTIFICATE NUMBER:	REVISION NUMBER:
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.		

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liab. GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:		6057035330	3/7/2022	3/7/2023	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPI/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY		6057035327	3/7/2022	3/7/2023	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000		6057035358	3/7/2022	3/7/2023	EACH OCCURRENCE \$ 9,000,000 AGGREGATE \$ 9,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N N/A	6057035344	3/7/2022	3/7/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
D	Professional Liab.		MKL7PL0005188	3/7/2022	3/7/2023	Per Claim/Aggregate \$ 5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 Pollution Liability is included in the Professional Liability policy and shares the limits per the policy terms and conditions.

CERTIFICATE HOLDER	CANCELLATION
EVIDENCE OF COVERAGE	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE

ACORD 25 (2016/03)

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STATEMENT OF QUALIFICATIONS

VENDOR CERTIFICATES SWAM CERTIFICATE



MARK D. SCOTT
CABINET SECRETARY

STATE OF WEST VIRGINIA
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION

W. MICHAEL SHEETS
DIRECTOR

June 28, 2022

POTESTA & ASSOCIATES INC
7012 MACCORKLE AVE SE
CHARLESTON, WV 25304

DANA L. BURNS:

This is to notify you that your Small, Women-, and Minority-Owned Businesses (SWAM) Certification Application has been approved based on your representations that the vendor named above meets the definition of a Small, Women-, and Minority-Owned Businesses as set forth in the *West Virginia Code of State Rules* 148-22-1 et seq. This certification becomes effective:

06/28/2022

And shall automatically expire without notice two years after the effective date unless revoked by the Purchasing Director or upon expiration pursuant to the *West Virginia Code of State Rules* 148-22-8. The type(s) of Small, Women-, and Minority-Owned Businesses (SWAM) Certification approved for your entity:

Small Business

At the end of your two-year certification period, if you wish to reapply, please complete a WV-1 form or apply for re-certification through the Vendor Self-Service portal at wvOASIS.gov. Complete renewal instructions, application forms, and a list of all SWAM-Certified entities are available online at www.state.wv.us/admin/purchase/VendorReg.html.

If you have questions, please contact the West Virginia Purchasing Division at 304-558-2306.

Sincerely,

Terra Oliver
Vendor Registration Coordinator

APPENDIX A



EDUCATION

M.S. Economics, concentration in Mineral Economics,
Econometrics, and Microeconomics
West Virginia University

B.S. Business Administration
West Virginia University

SERVICE ON BOARDS AND COMMISSIONS

- Past Chairman and current Commissioner, Ohio River Valley Water Sanitation Commission
- Past Chairman and current Member, Board of Trustees, The West Virginia Nature Conservancy
- Member of the West Virginia Land & Mineral Owners Board of Directors
- Past Chairman, The Greater Kanawha Valley Foundation

ADMINISTRATIVE EXPERIENCE

President of Potesta & Associates, Inc., a full-service engineering, design, and environmental consulting company with offices in Charleston and Morgantown, West Virginia, and Winchester, Virginia. In this position, he guides the professional staff of skilled engineers and scientists with his knowledge of federal and environmental regulatory and statutory schemes.

PROFESSIONAL EXPERIENCE

Prior to forming Potesta & Associates, Inc.

1989-1997 – President of an environmental and engineering consulting company, which he formed in 1989. Under his guidance, the company grew into a full-service environmental consulting, design, and construction company with a staff of over 50 professional and support personnel.

1985-1988 – Director of the West Virginia Department of Natural Resources, an agency with an annual budget of \$23 million and 700 full-time employees. The office of Director included supervision of Water Resource and Waste Management Division, Land and Real Estate Office, Office of Regulatory Affairs, Conservation, Education, and Litter Control, Public Information Office, and Wonderful West Virginia Magazine. He also served as Chairman on the State Emergency Response Commission and the Title III organization mandated by the federal Superfund Amendments and Reauthorization Act.

1984-1985 – Deputy Director of the West Virginia Department of Natural Resources, responsible for overseeing environmental regulatory programs described under Director's position and for the supervision of programs associated with the West Virginia Surface Coal Mining and Reclamation Act.

1981-1984 – Marketing Director of the West Virginia Coal Development Authority, responsible for promotion of West Virginia coal in both domestic and export markets requiring expertise in coal reserves, coal quality, transportation networks, and market demands.

DANA L. BURNS, P.E., P.S.

Vice President



EDUCATION

M.S. Civil Engineering, 1979
West Virginia University

B.S. Civil Engineering, 1978
West Virginia University

EMPLOYMENT HISTORY

1997-Present	Potesta & Associates, Inc.
1994-1997	Terradon
1979-1994	GAI Consultants, Inc.
1978-1979	West Virginia University
1976-1977	West Virginia Department of Highways (summers)

PROFESSIONAL REGISTRATIONS

- Professional Engineer – West Virginia, Illinois
- Professional Surveyor – West Virginia

PROFESSIONAL CERTIFICATIONS

40-Hour Health and Safety Training

SERVICE ON BOARDS AND COMMISSIONS

- Environmental/Technical Committee member – West Virginia Coal Association
- Environmental Committee member – Kentucky Coal Association

- Past Board of Directors member and current Waste Team Chairman on the Environmental Safety and Health Committee – West Virginia Manufacturers Association
- Environmental and Safety Committee member – Independent Oil and Gas Association of West Virginia
- Environmental Committee member – West Virginia Oil and Natural Gas Association
- Past President – West Virginia Society of Professional Engineers, Professional Engineers in Private Practice
- Past President and past Board of Directors member – American Council of Engineering Companies West Virginia Chapter
- Past Chairman of Transportation Committee – American Council of Engineering Companies West Virginia Chapter
- Past Board of Directors member – Society of American Military Engineers Huntington Post
- Member Committee D-18 on Soil and Rock – American Society for Testing and Materials (ASTM)

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- National Society of Professional Engineers
- WV Society of Professional Surveyors

AREAS OF SPECIALIZATION

Management of design and permitting of civil, environmental, geotechnical, and mining engineering projects. Siting, design, and permitting of industrial and municipal waste disposal sites; reclamation of abandoned mine lands; and development of stormwater management plans and groundwater sampling programs. Environmental/reclamation liability assessments. Development of site plans for commercial and industrial facilities including hydrologic and hydraulic analyses. Expert witness testimony. Directs engineering division including day-to-day operation of headquarters and three branch offices concerning staffing, coordination, training, business development, and overall management of technical and support staff.

PROFESSIONAL EXPERIENCE

Civil/Site Design

Utility extension, site grading plans, stormwater management, roadway design, and permitting for site development:

- Residential subdivisions
- Commercial developments

University of Charleston – Principal-in-Charge for the following projects:

- Development of topographic mapping of campus
- Evaluation of storm sewer system
- Civil site services – UC Pharmacy School, New Hall, Middle Hall, and Brotherton Hall
- Design of new campus entrance roadway

Marshall University – Principal-in-Charge for the following projects:

- 400 bed housing project
- Biotechnology Center
- Fifth Avenue parking and 6th Avenue parking facility
- Jomie Jazz Center
- Childcare Center
- Mid-Ohio Valley Center
- Campus landscape master use plan
- Campus improvements project
- MU Graduate College South Charleston campus
- Student Center and Henderson Center
- Bookstore addition
- University Heights

Glenville State University – Principal-in-Charge for the following projects:

- Student Residence Hall
- Athletic Convocation Center and Forestry/Survey Class Center

West Virginia University – Principal-in-Charge for a sidewalk repair project located near Allen Hall on the Evansdale Campus in Morgantown, West Virginia.

The Villages at Coolfont – Principal-in-Charge to provide environmental and engineering consulting services for the redevelopment of the Coolfont Recreation property in

Morgan County, West Virginia to create a second home community with high-end amenities:

- Phase I Environmental Site Assessment
- American Land Title Association (ALTA) boundary and property survey of 997 acres
- Completed an assessment of the facility's sanitary sewer wastewater treatment plant to facilitate acquisition of the property.
- Participated in weeklong planning charrette with client, land planners, and other design consultants to assess characteristics of property, identify opportunities and constraints, obtain input from local residents and businesses, and develop design guidelines.
- Land use plan including 1,300 homes, a village center, spa, expansion of an existing lake, a proposed second lake, walking/hiking/biking trails, and the necessary infrastructure.
- Civil engineering design for potable water and wastewater treatment facilities.
- Selected source well locations, drilled 3 source test wells, and completed field testing and permitting.
- Designed 300 gallon per minute potable water treatment plant.
- Designed 2- 316,000-gallon water storage tanks and 75,000 LF of distribution system.
- Completed the design and permitting for a 448,000-gallon per day membrane bioreactor wastewater treatment plant, including the design of a 70,000 LF collection system.
- Assisted with permitting required for the development of the new lake and upgrades/expansion of the existing lake (included were Section 404 individual permit and Section 401 water quality certification).
- Prepared roadway and stormwater management plans, including typical pavement sections, road profiles, geometric layout plan, culvert and drop inlet sizing, drainage conveyance pipe and channel profiles, and miscellaneous stormwater management details.

City of Charleston – Inspection and preparation of rehabilitation design for Parking Garage No. 1.

Tucker County Industrial Park – Principal-in-Charge for the design which included water and sewer lines, stormwater management design, roadway design, pavement design, site grading plan, master plan, and geotechnical exploration/foundation recommendations.

Principal-in-Charge for site grading plans, stormwater management system, site surveying, roadway/parking lot design, wetland delineation/mitigation, and construction monitoring for the 400,000-square foot Coldwater Creek distribution center in Parkersburg, West Virginia.

Principal-in-Charge for the civil/site design for the new Sissonville Middle School in Kanawha County, West Virginia. Project included site grading plan with more than 230,000 cubic yards of earthwork to obtain 20 acres of level ground for a 74,000-square foot school, football field, soccer field, baseball field, access roadways, and parking areas. Project included utility designs for water service and sanitary and sewer. Stormwater collection systems and erosion and sediment control plan/permit completed.

Principal-in-Charge for civil/site design for new Riverview High School and Bradshaw Elementary School in McDowell County, West Virginia. Project included 2,500 linear feet of relocated WV Route 80, relocation of 1,200 feet of Oozley Branch, and site work (grading, stormwater drainage, geotechnical recommendations, sanitary sewer, water, and electrical services) to serve the two schools. Project design included site survey, geotechnical exploration, foundation recommendations, design of excavation slopes, layout of schools, parking areas and athletic fields, utility design, roadway relocations plans, and stream relocations plans. Responsible for the design and preparation of contract bid documents (specifications and drawings) for civil/site work. POTESta served as a subconsultant to ZMM on this project.

Principal-in-Charge for civil/site design and permitting associated with the construction of three synthetic fuel pellet plants in McDowell County, Nicholas County, and Kanawha County, West Virginia. Project included developing synthetic fuel manufacturing facilities on inactive surface mining sites. Services included subsurface exploration, foundation recommendations, grading plans, stormwater management plans, preparation of permit applications, and construction monitoring for site grading and foundation construction. The McDowell County site included a water source study to identify and select water sources for the manufacturing process. The three plants had a construction cost of \$25 million. Project was a design/build arrangement with POTESta working directly for the owner.

Carmeuse Lime & Stone – Principal-in-Charge of engineering and environmental services for the expansion of current quarry operations at Winchester quarry in Winchester, Virginia. The expansion includes the addition of two new vertical lime kilns and associated equipment, increasing their current aggregate crushing operation, and expanding their rail system to allow for increased shipping of product.

- Design included grading, stormwater management, and an access road crossing for a rail loop encircling the lime kilns and aggregate crushing areas with rail spurs for loading and unloading of product to connect to two mainline rail carriers.
- The total project track length consists of approximately 29,000 linear feet of rail.
- The design of the rail expansion includes trackside ditches, culverts, stormwater management systems, gas line relocations and crossings, rail crossings, and internal plant roadways, as well as grading for the expanded aggregate plant and lime kilns.
- Additional designs included civil/site services for a new office building and design of the sanitary water treatment system for this building.
- Acquired the necessary approvals to construct this project, such as approvals from local planning and zoning, inspections, health departments, and state governments such as Virginia Department of Transportation, Department of Environmental Quality (DEQ) and Department of Mining and Mineral Extraction (DMME).
- Conducted wetland delineations, developed reports, and completed applications to the Norfolk District (Northern Virginia field office) of the United States Army Corps of Engineers (USACE).

Development of specifications for a sand mound treatment system in the U.S. Air Training Center near Pittsburgh, Pennsylvania.

Water Lines, Water Storage Tanks, and Water Treatment Plants

New extensions and replacement of existing lines:

- Cassity Fork Water Supply Extension Project – Randolph County, WV (Project Manager)
- Godby Branch Water Supply Extension Project – Logan County, WV (Project Manager)
- Beaver Creek Water Supply Extension – Upshur County, WV (Project Manager)

- Buff Creek/Trace Fork – Putnam County, WV (Principal-in-Charge)
- Route 60 – Putnam County, WV (Principal-in-Charge)
- Boone County PSD numerous extensions – Boone County, WV (Principal-in-Charge)

West Virginia American Water Company – Principal-in-Charge for construction administration/monitoring for Poca River Water Line Extension Project, Cabell County Water Line Extension Project, Contract No. 7, Spite Road Water Line Extension Project, and Fisher Ridge Water Line Extension Project. Work included construction monitoring, preparation of weekly reports, review of contractor submittals, review of contractor invoices, and preparation of records drawings for 100,000+ linear feet of water line extensions.

City of Philippi – Principal-in-Charge for municipal water system upgrade project. Work included design of two replacement booster stations, two new water storage tanks, new pumps for an existing booster station, a 1,500-foot water line extension, and telemetry systems. Drawings, specifications, and a cost estimate were prepared.

West Virginia American Water Company – Principal-in-Charge for Residuals Handling Facility project at the 32 MGD Kanawha Valley Water Treatment Plant, including coordination design consultant. Design included sludge pumping station, 950,000-gallon reinforced concrete gravity thickener, two belt filter presses, chemical feed systems, plate settler, and associated control and piping. Work included preparing design concept, surveying, subsurface exploration, preparation of drawings, specifications, cost estimate and permit applications, conductance of pre-bid public relations meeting, evaluation of bids, construction observation, review of contractor submittals, review of change order requests, and review of contractor invoices.

West Virginia American Water Company – Principal-in-Charge for evaluation of Town of Pineville water treatment plant and water distribution system, including observation of system during site visit, records review, discussions with regulatory officials, and issuance of findings in a report.

Tucker County Development Authority – Principal-in-Charge for design of approximately 10,000 feet of water line and sewer line to serve an industrial park, including a lift station. Drawings, specifications, and a cost estimate

were prepared. Also performed construction administration services.

West Virginia Bureau for Public Health – Principal-in-Charge for services associated with Source Water Assessment Protection Plans (SWAPP) for 38 public water systems throughout West Virginia. Services provided included windshield surveys to identify and locate (via GPS) potential contaminant sources (PCS's), review of regulatory databases, entering data into Access database, and preparation of summary reports.

City of Philippi – Principal-in-Charge for relocation of water lines due to proposed roadway. Relocation included approximately 4,000 feet of 1-inch to 12-inch diameter pipe, fire hydrants, meters, and valves. Prepared construction drawings, specifications, and quantities.

West Virginia American Water Company – Principal-in-Charge for hydraulic analysis for water supply extensions (total of 23 miles) in Cabell County, West Virginia, including line sizing and design of booster station and PRVs.

Management of design, permitting, and construction monitoring of more than 40 miles of new waterline serving rural communities in southern West Virginia.

West Virginia Department of Abandoned Mine Lands – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for six-mile water line extension including fire protection. Project included 90,000-gallon water tank, booster station, and pressure relief valves. Extension tied into Norton Harding Jimtown PSD System and served town of Cassity in Randolph County.

West Virginia Department of Abandoned Mine Lands – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for a half-mile water line extension to serve Beaver Creek near Junior in Randolph County.

West Virginia Department of Abandoned Mine Lands—Management of four Phase II water studies and five Phase I water studies to determine if water supplies had been affected by coal mining. Work included resident interviews, mine map searches, area reconnaissance, obtaining water samples, reviewing water analysis data, preparing conceptual designs and associated costs and preparation of summary report.

Sewer Lines and WWTPs

Washington County Industrial Development Agency – Design of a holding tank and ventilation system vault near Houston, Pennsylvania.

West Virginia American Water Company – Principal-in-Charge for evaluation of wastewater collections systems and treatment plants for two municipalities (Oak Hill and White Sulphur Springs) in West Virginia. Included were site visits to observe system, discussions with system operators and regulatory officials, records review, compilation of DMR data and issuance of findings in reports.

Geotechnical

Subsurface exploration, evaluation, and design of remedial measure for landslides:

- Soldier beam and lagging retaining walls
- Gabion walls
- Grade/drain/compact in-place
- Geo-grid reinforcement with grade/drain/compact in-place

Plasma Processing Corporation – Management of subsurface exploration and preparation of soils report near Ravenswood, West Virginia.

West Virginia University – Principal-in-Charge for the following projects:

- WVU Intermodal Parking Garage on the Medical Center Campus – geotechnical and civil engineering
- WVU Engineering Building – geotechnical evaluation

Principal-in-Charge for Williamson Landslide Project involving an abandoned mine land site. Geotechnical exploration and design of 480-foot-long soldier beam and lagging retaining wall with tiebacks to support loose mine spoil backfill along the edge of a previously mined area with steep terrain. Project was required to protect an existing 125-bed nursing home facility.

Landfills/Solid Waste/Waste Disposal

Design and permitting of new landfills and development of cell closure plans:

Municipal Landfills –

- West Virginia Solid Waste Management Board/Monongalia County Sanitary Landfill – Morgantown, WV
- North Folk Landfill – Wheeling, West Virginia
- Disposal Service, Inc. Landfill – Hurricane, WV
- Sycamore Landfill, Inc. – Hurricane, WV
- City of Charleston Landfill – Charleston, WV
- Mingo County Landfill – Mingo County, WV
- Omar Landfill – Omar, WV
- Pocahontas County Landfill – Marlinton, WV
- HAM Sanitary Landfill – Peterstown, WV
- Kanawha- Western Landfill – Cross Lanes, WV
- S&S Landfill – West Milford, WV
- Brooke County Landfill – Brooke County, WV
- Wetzel County Landfill – Wetzel County, WV
- WVDEP's Landfill Closure Assistance Program
 - Montgomery Sanitary Landfill – Montgomery, WV
 - Wyoming County Sanitary Landfill – Pineville, WV
 - Jackson County Sanitary Landfill – Ripley, WV
 - City of Moundsville Landfill – Charleston, WV

Industrial Solid Waste (Fly Ash, Bottom Ash, Scrubber Sludge) –

- Mobay Hazardous Waste Landfill – Natrium, WV
- American Cyanamid (4 projects) – Willow Island, WV
- Client confidential – Parkersburg, WV
- Monsanto Company (multiple projects) – Nitro, WV
- Harrison Power Station – Haywood, WV
- Fort Martin Power Station – Morgantown, WV
- Mount Storm Power Station – Mount Storm, WV
- Keystone Power Station – Elderton, PA
- New Castle Power Station – New Castle, PA
- Conemaugh Power Station – New Florence, PA
- Alcoa Corporation – Newsburg, IN
- Portsmouth Power Station – Portsmouth, VA
- F.B. Culley Power Station – Newburgh, IN
- Hatfield Power Station – Masontown, PA
- Armstrong Power Station – Armstrong County, PA
- Cheswick Power Station – Springdale, PA

Design, permitting, economic analyses, and preparation of construction bid documents for coal ash/refuse sites including HDPE and PVC liner systems:

- Virginia Electric and Power Company
 - Portsmouth Power Station ash pond to dry fill conversion project
 - Mount Storm Interim Ash Site
- Pennsylvania Electric Company

- Keystone Coal Ash/Coal Refuse Site
- Allegheny Power Station
- Hatfield Ash Site

WVDEP Office of Waste Management – Development construction drawings, technical specifications, contractor's bid sheet and engineer's cost estimate for closure of Montgomery Sanitary Landfill. Work included leachate collection system, cap and double walled leachate tank.

WVDEP Office of Waste Management – Development of construction drawings, technical specifications, contractor's bid sheet, and engineer's cost estimate for final closure of the Wyoming County Landfill. Work included site assessment, double walled leachate tank, pump station, and connection of leachate line to Center Public Service District sanitary sewer.

WVDEP Office of Waste Management – Development of interim closure plans including leachate collection system, adequacy of groundwater monitoring wells and soil cover for the Jackson County Landfill and the City of Moundsville Landfill.

WV Solid Waste Management Board's Monongalia County Sanitary Landfill – Management of three liner expansions, borrow area determination, minor permit modifications, 1.6 MG double-lined leachate pond design, construction monitoring, and investigation of future alternatives.

Disposal Services, Inc. – Evaluation of landfill expansion and leachate minimization. Preparation of permit application for Phase I Cell 3 and Phase II including drawings, specifications, and CQA manual. Preparation of construction drawings for Phase I Cell 3 Stage I and management of construction monitoring. Preparation of erosion and sedimentation control plan, soldier beam and lagging retaining wall, gabion basket retaining wall, and assistance on FERC permit to relocate gas line in Hurricane, West Virginia.

S&S Landfill – Preparation of Landfill Expansion Revisions, permit revisions, and permit negotiation. Detailed review of hydrogeology and groundwater flow regime. Management of QA/QC for landfill expansion including clay/synthetic liner system, double walled leachate tank, sedimentation pond, drainage channels, and associated facilities in Harrison County, West Virginia.

Pocahontas County Solid Waste Authority – Management of miscellaneous services including preliminary closure plan, evaluation of leachate treatment alternatives, repair of tear in synthetic liner, preparation of annual reports, and surveying for Pocahontas County Landfill in Marlinton, West Virginia.

Kanawha County Solid Waste Authority – Investigation of potential landfill fire at Kanawha Western Landfill. Detailed geologic and hydrologic studies, monitoring well installation, and preparation of associated sections of landfill permits.

- North Fork Landfill – Wheeling, WV
- Sycamore Landfill – Hurricane, WV

Rhone-Poulenc Ag Company – Management of non-hazardous industrial landfill design project involving design report, technical specifications, construction drawings, QA/QC manual, operation manual, permit application, and environmental assessment. Included meetings with EPA Region 3 and WV Division of Natural Resources. Also, three site selection studies. Complete geologic and hydrogeologic investigations including installation of monitoring wells.

Tennessee Valley Authority – Economic analyses of wet versus dry disposal processes, including conveyor belts, trucks, and sluicing by pipe for fly ash and bottom ash.

Pennsylvania Electric Company – Evaluation of natural and synthetic liner systems for coal ash/coal refuse sites. Preparation of permit applications for the New Castle ash site and Mitchell scrubber sludge disposal site:

- Pennsylvania Power Company
- Allegheny Power System

Coordinator of the compilation of data for a RCRA Part B permit application for a hazardous waste transfer facility in Parkersburg, West Virginia including SPCC plan.

Sludge sampling programs at the Institute, West Virginia plant of Union Carbide Corporation and the Tri-State Terminal of Ashland Petroleum Company.

Siting studies, including environmental impacts and economic analyses, for industrial waste and coal ash/refuse sites:

- Peabody Coal Company – slurry impoundment

- Rhone Poulenc Ag Company – 3 sites for industrial landfill
- Virginia Electric and Power Company – Mt. Storm Power Station
- Southern Indiana Gas and Electric Company – 4 sites at F.B. Culley Station
- Alocia Generating Corporation – 7 sites at Warrick Station

American Cyanamid Company – Management of QA/QC monitoring program for the first RCRA industrial waste impoundment in EPA Region 3. Composite liner system consisted of 3-foot soil-bentonite liner and two 60-mil HDPE synthetic liners separated by HDPE drainage net. Provided on-site testing laboratory. Daily and weekly project reports were provided. Prepared summary report and necessary “certifications” for submittal to WV Division of Natural Resources and EPA in Willow Island, West Virginia.

American Cyanamid Company – Management of QA/QC monitoring program for a stormwater retention basin consisting of 3’ soil bentonite liner with concrete overlay. Daily, weekly, and project summary reports were prepared in Willow Island, West Virginia.

American Cyanamid Company – Preparation of plans, specifications, and permit application for the closure of an industrial waste disposal site. The capping system included geogrid to assist in supporting the overlying HDPE liner and soil cap in Willow Island, West Virginia.

Electric Power Research Institute – Preparation of the Coal Ash Disposal Manual and various manuals for the High Volume/Low Technology Fly Ash Utilization Program.

Electric Power Research Institute – Development of a computer program that provides a detailed cost estimate for a coal ash disposal area.

Rhone Poulenc Ag Company – Evaluation of settling characteristics for an emergency fly ash disposal pond and design of associated modifications at a plant in Institute, West Virginia.

American Cyanamid Company – Management of QA/QC monitoring for a closure of a 3-acre hazardous waste disposal area with sludge stabilization and an HDPE cap. Provided an on-site testing laboratory, daily and weekly project reports, a summary report, and agency required certifications in Willow Island, West Virginia.

American Cyanamid Company – Management of QA/QC monitoring for the stabilization and capping of 10-acre hazardous waste equalization basin in Willow Island, West Virginia.

Rhone Poulenc Ag Company – Sampling/sounding of two basins containing sludge from secondary biological treatment of industrial wastewater and subsequent determination of sludge quantities.

Development of alternative truck transportation cost schemes:

- Industrial and Hazardous Waste Management Study – Allegheny County, PA
- Holcomb, KA Power Station – Sunflower Electric Cooperative
- Portsmouth Station remote ash structural fill – Virginia Electric and Power Company

Roadway Design

Principal-in-Charge for design of new entrance roadway to the University of Charleston and the utility extension, surveying, and general civil engineering for a 440-bed dormitory. Project was a design/build.

West Virginia Divisions of Highways – Inspection of bridge and highway construction.

Managed numerous industrial access roads. Roadways were designed for the private sector. Design was coordinated with and approved by the West Virginia Division of Highways and roadways were accepted into the state transportation system.

- ZMM Architects – Relocation of State Route 80 for construction of new elementary and high schools at Bradshaw in McDowell County, WV
- Jackson County Development Authority and Double C Enterprises – Industrial Park access road and County Route upgrade in Kenna, WV
- Roane County Economic Development Authority – National Industrial Lumber access road in Amma, WV
- Tucker County Development Authority – Tucker County Industrial Park access road in Davis, WV
- Wood County Development Authority – Luigino’s access road in Parkersburg, WV
- University of Charleston – Design of new entrance road to University of Charleston and redesign of

MacCorkle Avenue (State Route 61) intersection/turn lanes in Charleston, WV

- N-Visions Architects – Entrance road, bus loop, and emergency exit roadway for new Sissonville Middle School in Sissonville, WV
- Entrance road and bus loop for Trap Hill Middle School in Raleigh County, WV

WV Division of Highways – Managed environmental permitting, surveying, and design of four-lane 1.25-mile North Bridgeport Connector Road from Interstate 79 Jerry Dove Interchange to Benedum Airport in Bridgeport, West Virginia.

WV Division of Highways under open-end agreements for:

- Landslides and slope stability projects
- Surveying
- Asbestos services

WV Division of Highways – Managed geotechnical, environmental, right-of-way, and survey work performed as a subconsultant for various projects:

- King Coal Highway (section near Pineville, WV)
- Sharon Heights Connector
- Eldora and Enterprise Connector
- Dundon Bridge
- Martha Truss Bridge
- Martha Concrete Girder Bridge
- Upgrade of three bridges on Interstate 81
- Corridor H (section near Kerns, WV)
- Corridor D (section near Washington, WV)

Oil and Gas

Columbia Gas Transmission Corporation – Management of consulting services for environmental report preparation and FERC permit applications for various natural gas pipeline projects.

Principal-in-Charge of well pad design, access road layout, landslide remediation design, evaluation of water supply sources and distribution systems, design of water treatment systems, impoundment design, stormwater management plans, permitting, AST inspections, surveying, and SPCC Plans for various major gas clients in the Marcellus and Utica formations.

- Stone Energy

- EQT
- Chesapeake
- Gastar
- NiSource

Storage Tanks

Principal-in-Charge of the registration, preparation of spill prevention response plans, and inspection of aboveground storage tanks (ASTs) for over 500 ASTs for numerous clients, including:

- NiSource
- Rubberlite
- CI Thornburg
- Tetra Technologies
- CAMC
- Interstate Hardwood
- Central Supply

Closure of aboveground storage tanks, including preparation of documentation for regulatory agency and sample acquisition and analyses:

- Rhone-Poulenc Ag Company – Institute, WV
- American Cyanamid Company – Willow Island, WV

Investigation of contamination from underground storage tanks and hydrocarbon spills. Included preparation of necessary regulatory forms, sample acquisition and analyses, and meeting with regulatory agency.

- West Virginia Division of Natural Resources – various projects under Master Agreement
- Goldman Associates
- Vandalia Mining Company
- Marshall University

Mining

Peabody Coal Company – Evaluation of potential stream flow attributed to long-wall deep mining subsidence in minimal overburden areas in southern West Virginia. Responsibilities included the review of mine maps, stream reconnaissance studies, and the establishment of three in-stream V-notch weirs. The weirs were monitored and maintained during a seasonal study period to generate direct flow measurements. The WVDEP also prepared a study for the site that was reviewed, and comments prepared for the results.

Principal-in-Charge on numerous Independent Third-Party Audits at sites for various coal producers. Independent Third-Party Reviews of mines/complexes were undertaken with a thorough review to assess compliance of the operation to various federal statutes and equivalent to state laws. Specific areas of review included are generally determined by the needs of the client or the requirements of governmental agencies and have included an assessment of the client's compliance with the following:

- Clean Air Act
- Clean Water Act
- Resource Conservation and Recovery Act
- Safe Drinking Water Act
- Toxic Substance Control Act
- Comprehensive Environmental Response, Compensation and Liability Act
- Emergency Planning and Community Right to Know Act
- Federal Insecticide, Fungicide and Rodenticide Act
- Oil Pollution Act
- Mine Safety and Health Administration
- Surface Mining and Reclamation Act
- National Pollution Discharge Elimination System
- Others as required

Development of reclamation plans for over 70 projects including landslides, mine fires, acid mine drainage, mine subsidence, refuse piles, water supply systems, and asbestos abatement. Projects were completed for West Virginia Division of Energy, West Virginia Division of Environmental Protection, Virginia Abandoned Mine Lands, and Ohio Department of Natural Resources and include the following:

- Duncan Hill Subsidence
- Beckley Subsidence
- Jonben (Haga) Subsidence
- Holden (Padgett) Subsidence
- Gray and Iaquina Subsidence
- St. John's Road Subsidence
- Route 19/28 Subsidence
- Mt. Hope Subsidence
- Huffman Street Subsidence
- Morgantown Airport Drainage/Subsidence
- Fairmont East Subsidence
- Fairmont IV Subsidence
- Cheyenne Sales Company Reclamation
- Little Whitestick Refuse
- Crany Mine Dump

- Morgan Mine Fire
- MacArthur Phase 2 Subsidence
- Lake Lynn Complex
- MacArthur Mine Subsidence
- East Lynn II
- Flipping Hollow Complex
- Sundial (Hatfield) Refuse Piles
- Mill Creek Refuse Pile
- John's Branch Coal Refuse Dam
- Jessop Highway #10
- Lando (Edwards) Drainage
- Taylorville (Cantrell) Drainage
- Borderland (Matney) Portals
- Peach Ridge Complex
- Measle Fork Refuse
- Georges Creek Portals
- Putney Impoundment
- Kopperston (John's Branch) Refuse Emergency
- Marmet (Wells Drive) Landslide Emergency
- Marmet (Clark) Drainage
- Pringle Run #2
- Mountain Run Refuse and Portals
- Fairmont East Mine Drainage
- May Portal (Virginia Abandoned Mine Lands)
- Williamson (Hatfield) Landslide
- Georges Creek (Lucas) Rockslide
- Rachel Refuse
- Grass Run Refuse
- Allen Sheridan Hazardous Facility (asbestos)
- Elk City- Century- Volga Phase I/II Water Study
- Camp Mohonegan Regrade
- Comfort Run Coal Company (asbestos)
- Allen AMD
- Cora Mine Drainage No. II
- Covey Creek Mine Fire
- Vivian Refuse Pile
- Summerlee Refuse Pile (won 1996 southern reclamation award)
- Kimball Refuse Pile (won 1995 southern reclamation award)
- Hampden (Smith) Landslide
- Bear Run Refuse (won 1994 Ducks Unlimited award)
- Charleston (Ratcliffe) Landslide
- Garrison Complex
- Mulberry Fork (Stover) Landslide
- Courtright Highwall
- Belle Landslide
- Minden Drilling
- Kitchen/Gibson Landslide
- High Coal Tipple

- Omar Refuse Pile (won reclamation of the year award)
- Logan Drainage
- Switzer Adams/Robinson Drainage
- Follansbee Drainage
- Hawkins AMD
- Vargo Drainage
- Duck Creek Landslide
- Kistler Mine Fire
- Turner Douglas Complex
- Buffalo Creek No. 5 Refuse
- Dawmont Mine Facility
- Helen (Lewis) Refuse
- Upshur 10/15 Drainage
- Webster County Water Studies
- Jaeger Water Feasibility Study
- Burnwell, Standard, and Collinsdale Water Line Extension
- Clay-Roane PSD Water Feasibility Study
- Burnsville PSD Water Feasibility Study
- Brandonville/Pisgah Water Feasibility Study
- Cuzzart/4-H Water Feasibility Study
- Hudson/Mt. Nebo Water Feasibility Study
- Phase I Water Studies Brooke and Fayette Counties
 - Gauley River PSD – Belva
 - Hammond PSD – Wellsburg
 - New Haven Chamber of Commerce – Hico
- Mill Creek Regional Water Project Phase II Water Study (Boone, Lincoln, and Logan Counties)
- Godby Branch Phase II Water Study
- Madison Street Portals/Fairview Route 218 Portals
- Putnam County Phase I Water Studies
 - Heizer Creek
 - Manila Creek
- Boone County Phase I Water Studies
 - Jeffrey Area – Jeffery, Hewett Creek, Seacoal
 - Ottawa Area – Ottawa, Greenview, Missouri Fork, Meadow Fork, Aleshire Branch, Dent Fork, Mike's Fork
- Phase II Water Feasibility Studies
 - Logan County – Cow Creek, Crooked Creek, Upper Rum Creek
- Phase I Water Studies for Logan County
 - Pecks Mill – Godby Heights Communities
 - Cow Creek – Sarah Ann – Crystal Blocks Communities
 - Upper Rum Creek Community
 - Clothier Community
 - Crooked Creek Community
 - Godby Branch
 - Whitman Creek – Holden Project
- Beaver Creek Waterline Extension: Phase II Water Project

- Cassity Fork Water Supply Extension: Phase II Water Project

Subsurface explorations, subsidence monitoring, review of a coal reserve analysis, site plans, preblast/presubsidence surveys, hydrologic analyses, preparation of mining permits, and design and permitting of coal slurry impoundments for coal mining companies in West Virginia, Virginia, Kentucky, Ohio, and Maryland.

- Peabody Coal Company
- Eastern Associated Coal Company
- Southern Ohio Coal Company
- Island Creek Corporation
- Massey Coal Services
- Appalachian Mining, Inc.
- Oneida Coal Company
- Old Ben Coal Company
- Mettiki Coal Company
- Shafer Brothers Coal Co.
- LP Minerals

Management of fly ash utilization permits for various coal companies:

- Rawl Sales, Inc.
- Elk Run Coal Company
- Appalachian Mining, Inc.
- Peerless Eagle Coal Company

Managed subsurface investigation, foundation design, and development of mine stabilization program for NASA's Independent Verification and Validation Center in Fairmont, West Virginia.

Monongahela Power Company – Development of fly ash flowable fill specification for submittal to WV Division of Highways in Fairmont, West Virginia.

Computer modeling of groundwater movement of contaminants resulting from underground coal gasification.

NPDES Industrial/Municipal Permitting

Completed National Pollutant Discharge Elimination System (NPDES) renewal permitting and associated agency negotiations for several facilities.

Plasma Processing Corporation – Management of numerous projects in Ravenswood, West Virginia including:

- Subsurface exploration and preparation of soils report
- NPDES Permit
- Development of sampling program for Plasma to follow in obtaining samples for NPDES Stormwater Analyses
- Development of hazardous waste operations manual
- Acquisition of WV Air Pollution Commission permits
- Environmental audit of facility operations

Hydrology and Hydraulics

City of Charleston – Hydrologic and hydraulic analyses of South Ruffner Watershed. Project analyzed various storm events and presented conceptual recommendations to reduce effects of these storms.

U.S. Army Corps of Engineers, Jacksonville District – Determination of watershed areas along the Suwannee River Basin.

Groundwater

Dilley's Mill – Principal-in-Charge for review of regional groundwater information for a summer Boy Scout camp facility to locate and construct a replacement drinking water well for the facility. Responsibilities included the development and review of existing facility usage, determination of the location and depth of the proposed water well and design of the well to meet with the requirements of the State of West Virginia Department of Health standards. Design of sewage collection system and synthetic lined sewage treatment lagoon including permitting.

Groundwater sampling programs:

- Herr's Island – Urban Redevelopment Authority of Pittsburgh
- Robertshaw Controls in New Stanton, PA
- New Castle Power Station
- Pennsylvania Power Company
- Portsmouth Power Station
- Virginia Electric and Power Company
- Rhone Poulenc Ag Company – Institute, WV

Management of pump tests:

- Peabody Coal Company – Bim, WV
- Southern Ohio Coal Company – Meigs County, OH
- Rhone-Poulenc Ag Company – Institute, WV

Rhone Poulenc Ag Company – Development of specification manual for conducting soil and groundwater sampling programs. Manual detailed decontamination methods and proper handling/disposal methods in Institute, West Virginia.

Air Pollution/Air Services

Principal-in-Charge for internal and external methane gas monitoring at nursing home facility in Boone County, West Virginia.

Urban Redevelopment Authority of Pittsburgh – Preliminary and detailed air pollution modeling for Pittsburgh's convention center complex and for the Washington Heights development.

Eastern Associated Coal Corporation – Management of certified emission statements for 11 coal preparation plants and air emission inventories for 8 coal preparation plants for submittal to the West Virginia Office of Air Quality.

Nicholson Construction Company – Operation permit from West Virginia Air Pollution Control Commission for cement/grout portable batch plant for mine subsidence control project in Follansbee, West Virginia.

Stream/Wetland Delineation, Permitting and Mitigation

Columbia Gas Transmission Corporation – Management of stream stabilization and restoration plan for segment of East Fork of Queer Creek in Hocking County, Ohio.

Environmental Assessments/Impact Statements

Management of numerous environmental assessments for property transactions:

- Arch Coal – Multiple WV Tracts ESA (60,500 acres)
- Massey Coal Services – Red Cedar Surface Mine (850 acres)
- Duke Energy – Chicopee Environmental Audit (6,000 acres)

- Pittston Coal Management Group – Phase I ESA (6,000 acres)
- Massey Coal Co. – Hampton Site, Spruce Laurel (130 acres)
- Eastern Associated/Peabody Coal – Phase I ESA (1,035 acres)
- Eastern Associated Coal – Environmental Due Diligence for Active and Closed Operations in KY and WV (100,000 acres)
- Peabody Coal – Multi-state Environmental Audit in WY, CO, NM, AZ, Western KY, IN, IL (250,000+ acres)
- Peabody Coal – Environmental Due Diligence for Properties in IL and IN (150,000+ acres)
- AMVEST Mineral Services – Phase I ESA (8,000 acres)
- Peabody Energy Corp. – Phase I ESA on Putnam Property (1,036 acres)
- Arch Coal – Environmental Compliance Audit in KY, WV, and VA (150,000+ acres)
- Massey – Consolidated Coal Co. Holden Complex (5,500 acres)
- Massey – Environmental/Reclamation Liability Assessment for Northland Resources (150 acres)
- Peabody Coal – Phase I ESA for Imperial Coal and Turner Properties (5,400 acres)
- Peabody Group – Environmental/Reclamation Liabilities for Kanawha Eagle, LLC Permits in Boone and Kanawha Counties, WV (350 acres)

Principal-in-charge for the Coalfields Industrial Site Survey performed for the West Virginia Development Office. Study identified and evaluated more than 1,000 former and current mining sites for use as industrial sites. McDowell County was one of six included in the study. The study considered accessibility, utility status and distance of required extensions, topography, site size, etc.

West Virginia Division of Highways – Coordination of Environmental Impact Statement for Route 19 upgrade from Summersville to Interstate 79 in Braxton County and New River Parkway from Sandstone Falls on I-64 to near Athens on I-77.



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting.

Know Ye That The State Board of Registration for Professional Engineers, of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

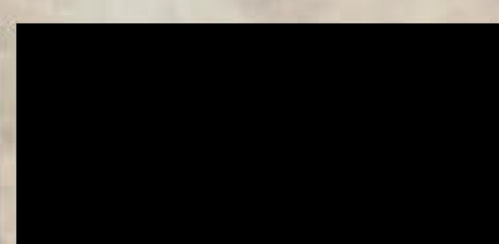
Dana L. Burns

DOES, IN PURSUANCE OF AUTHORITY VESTED IN IT

by law, hereby certify that he, having submitted satisfactory evidence of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number



To Hold and use such title in the practice of his profession, subject to the conditions prescribed by law.



Given under the hand and the Seal of the Board at the Capitol in the City of Charleston, this 17th day of Sept. in the year of our Lord One Thousand Nine Hundred and Eighty-Five and of the State the One Hundred Twenty-Second

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Frank Gaddy

Secretary

By

Robert S. Scott President

Frank Gaddy

Wm. A. Fickens

Kenneth H. Means



EDUCATION

- M.S. Biology (Emphasis in Aquatic Ecology and Toxicology)
Virginia Polytechnic Institute and State University
- B.S. Biology/Chemistry
Fairmont State College

EMPLOYMENT HISTORY

- 2000-Present Potesta & Associates, Inc.
1998-2000 Biological Monitoring, Inc.
1995-1998 Virginia Tech
1994-1995 Center for Environmental and Hazardous Materials Studies

PROFESSIONAL CERTIFICATIONS

- Certified Hydric Soil Investigator
- Certified Wetland Botanist
- Certified Wetland Delineator
- Certified Wetland Hydrologist
- State of West Virginia Office of Miners' Health, Safety & Training Class 32 Safety Sensitive Personnel

TRAINING/RELEVANT COURSE WORK

- River Morphology and Applications, Wildland Hydrology
- Applied Fluvial Geomorphology, Wildland Hydrology
- Methods for Stream Assessment and Analysis, WVU
- Introduction to Natural Stream Channel Design, WVU
- Advanced Stream Design, WVU
- Fluvial Geomorphology, WVU
- Developing Wetland Water Budgets, Swamp School

PROFESSIONAL AFFILIATIONS

- Society of Freshwater Scientist
- Society of Environmental Toxicology and Chemistry

AREAS OF SPECIALIZATION

Clean Water Act (CWA) permitting, compliance, including water pollution control permitting and regulatory compliance, stream and wetland delineation, and permitting (including mitigation), state water quality regulations, threatened and endangered species compliance, cultural and historic resource coordination, development of large scale environmental risk assessments, environmental assessments, biological assessments, environmental impact studies and other National Environmental Policy Act (NEPA) documents (noise, cumulative impacts, aesthetics), development of biological studies, toxicity evaluations, and preparation of environmental documents for non-environmental regulatory agencies, including the Public Service Commission.

PROFESSIONAL EXPERIENCE

Stream/Wetland Delineation, Permitting, and Mitigation

Served as project manager and senior scientist for multiple CWA permitting tasks covering Section 401, 402, and 404 compliances.

Prepared permit packages for stream and wetland impacts for United States Army Corps of Engineers individual and general Department of the Army authorizations, State (401) Water Quality Certification, and Public Lands Corporations.

Supervised and assisted in the preparation of mitigation plans and associated restoration plans, as well as environmental information documents for large scale surface disturbances.

Prepared large adaptive management plans that are compliant with Department of the Interior (DOI) recommendations.

Supervised and prepared projects that determine stream status (perennial, intermittent, or ephemeral) utilizing benthic and stream channel indicators (wetland and stream delineations) in West Virginia, Kentucky, Virginia, and Maryland. Projects have included the determination of jurisdictional streams and wetlands in atypical field conditions, as well as after-the-fact stream/wetland impacts utilizing site specific data as well as interpretation of historical data using ArcGIS.

Acted as an agent for applicants during negotiations with agency personnel. Typically, issues addressed are associated with impact determination and NEPA compliance (cultural resources, threatened and endangered species, land use, cumulative impacts, and aesthetics.)

Familiar with most Federal protocols utilized for the assessment of impacts to "waters of the U.S." Prepared the banking documents (prospectus, banking instrument, etc.) for the first mitigation banking program for stream and wetland credits in West Virginia.

Supervise, evaluate and report mitigation success using applicable performance standards for CWA Section 404 permitting.

Oil and Gas

Responsible for managing large scale Clean Water Act Projects associated with Marcellus Shale Production (well sites, well lines, and gathering lines) including field crew scheduling and coordination, stream/wetland delineation reporting, agency consultation, coordination of archaeological and bat/mussel surveys, and USACE 404 permitting. Responsible for managing pipeline projects where the role was environmental review or providing environmental permitting. Play role in agency interactions and litigation support.

NPDES Industrial/Municipal Permitting

Worked as part of a permitting team that prepared new, modified, and renewed (reissued) National Permit Discharge Elimination System (NPDES) permits for various clients in the energy and commercial sectors. Specific areas include water monitoring and narrative criteria applications, toxicity (standard bioassays, as well as toxic identification studies), aquatic ecosystem protection, biological studies, watershed hydrology, water quality, groundwater and surface water inventories, long-term flow studies, site specific water quality criteria and or variances, mixing zones, database management and adaptive management plans.

Responsible for managing and/or preparing State and Federal Regulatory Permits/Renewals/Modifications, including: Section 7 Threatened and Endangered Species USFWS and WVDNR Consultation, Section 106 State Historic Preservation Office Consultation, United States Army Corps of Engineers 404 Permits, West Virginia Division of Natural Resources - Office of Land and Streams Stream Activity Permits, and Individual State 401 Water Quality Certification. Work includes permitting and supporting documentation for wasteload allocation, Industrial NPDES Permit Applications/Permit Renewals, General WV/NPDES Storm Water Permit Applications/Permit Renewals, sampling plans, Groundwater Protection Plans (GPP), Storm Water Pollution Prevention Plans (SW3P), and Municipal Separate Storm Sewer System (MS4) General Permits.

Surface Water Sampling

Supervised multiple water quality monitoring programs. Projects have included oversight and management of sampling teams for pre-construction baseline, routine and special study water quality monitoring projects including non-traditional monitoring techniques such as sediment respiration. Many of the projects have included a database management and compliance component.

Mining

Worked as part of a permitting team (for various clients) that prepares new mining permits, as well as modification and renewals. Specific areas include land use, parks and historic lands information, fish and wildlife information including threatened/endangered species, water quality data, drainage information, NPDES permits, and narrative criteria applications.

Completed studies to address notice of violation (NOV) orders for accidental discharges into waters by mining companies including assessments of fish kills and the extent of black-water discharges as well as routine non-compliance issues. Act as representative for company in board hearings to address violations.

Risk Assessment

Completed large scale risk assessment in watersheds in Kentucky, West Virginia, and Virginia for associated with impacts to waters. Assessments included the use of biological monitoring (fish and benthic macroinvertebrates (including mussels)), acute and chronic toxicity testing, sediment toxicity testing, juvenile mussel toxicity testing, entrainment studies, water quality monitoring, water quality modeling, and specialized sediment sampling which included both physical and chemical characterizations. These projects have required large scale data integration, database management with an ArcGIS component.

Threatened/Endangered Species

Completed biological assessments for mussel species in the Kanawha and Gauley Rivers, as well as a document similar to a biological assessment for the Big Sandy River watershed. Completed biological assessments for bat species in West Virginia for various clients. Prepared appropriate documentation for Section 7 consultations with the United States Fish and Wildlife Service for various regulated entities.

Environmental Assessments/Impact Statements

Preparation and submittal of environmental information documents submitted to regulatory agencies for the development of the agencies environmental assessments. Topics addressed included: fish and wildlife resources; surface and groundwater, endangered species, noise, viewshed and aesthetics, traffic, floodplains, conservation, flooding, navigation, recreation, safety, environmental justice, socioeconomics, and other general environmental concerns. Development of alternative analyses including: a federal highways project which required a supplemental EIS; several large-scale mining operations whose alternatives included various mining methodologies (underground mining, highwall mining, etc.) as well as post mining land uses. Prepared and submitted environmental assessments for federal regulatory agencies as third-party contractor. Prepared,

reviewed and commented on Draft Environmental Impact Statements and for various federal agencies as third-party contractor. Completed assessments for federal agencies to determine the need for supplemental environmental documents.

Regulatory and Litigation Support

Provided testimony as both a factual witness and expert witness in federal court and before the West Virginia Environmental Quality Board. Testimony included site conditions, evaluation of reasonable potential, water quality issues, mitigation, and stream structure and function. Negotiated with state and federal agencies regarding fines for non-compliance. This includes completing large scale after-the-fact delineations and associated reporting for Section 308 and 309 Orders, negotiating mitigation, and evaluating and assessing NPDES compliance issues. Compliance issues include discharge monitoring reports, non-compliance notices, toxicity, and narrative guidance concerns.

Additional litigation work has included work performed for meeting specialized permitting requirements, like those for the Public Service Commission. This work has included testimony regarding studies for wind energy development and its impact on birds and threatened and endangered species.

Work for energy development has included applications for the Public Service Commission, completed for clients with the assistance of an attorney. Studies and documents have included: noise studies, landscape scale land use analysis, viewshed analysis, surface and groundwater studies, species consultations, delineations, coordination of contractors for consultations, and packaging of the applications.

Biological Studies and Sampling

Responsible for managing and reporting biological surveys using State and federal protocols for permitting and compliance. Responsible for the development, managing, and reporting of special studies including functional assessment studies, algal studies, vegetative studies, wetland macroinvertebrate studies, avian studies, bat studies, benthic macroinvertebrate studies, mussel surveys, fish surveys and specialized trout surveys. Responsible for managing and reporting biological toxicity evaluations using standard testing species, as well as specialized studies like those completed using juvenile mussels and larval fish for selenium deformities.

Completed an evaluation of the physical, chemical, and biological effects of acid mine drainage from abandoned mine lands in Virginia. Work included bioassays, biological monitoring, chemical monitoring, physical habitat evaluations, and functional assessments of the biological communities including algal community structure. Prepared documents for the use of acid mine drainage remediation for mitigation purposes.

Benthics

Completed benthic sampling for 18+ years. Capable of identifying most benthic macroinvertebrates at the genus level. Completed aquatic entomology coursework under Dr. R. Voshell at Virginia Tech.

Certificate of Training

Wetland Botanist

This certifies that

Jessica Yeager

is a Wetland Botanist and has
participated in 40 hours of instruction.

Certification Date: January 20, 2015

Certified Wetland Botanist ID# [REDACTED]
Expires January 20, 2020



Swamp School, LLC

RALEIGH, NC 27603
1-877-479-2673

www.SwampSchool.org



Marc Seelinger

SIGNATURE OF AUTHORIZATION



Certificate of Training

Wetland Delineation & Regional Supplement Training

This certifies that

Jessica Yeager

has participated in 36 hours of classroom & field instruction.
PWS Approved 2.4 Semester Hours

Date: November 26, 2014



Swamp School, LLC

RALEIGH, NC 27603
1-877-479-2673

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Marc Seelinger

SIGNATURE OF AUTHORIZATION



Professional Wetland Scientist™
Accredited Training Provider



The Swamp School

Jessica Yeager

CWB# [redacted]

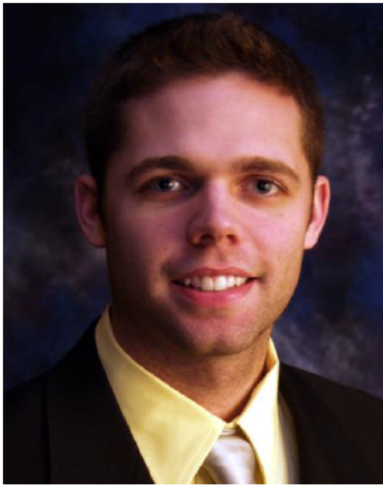
Valid Until
January 20, 2020

Certified

Wetland Botanist

TIMOTHY R. FERGUSON

Senior Scientist



EDUCATION

- M.S. Environmental Science, 2010
Marshall University
- B.S. Environmental Biology, 2006
Marshall University

EMPLOYMENT HISTORY

- 2006-Present Potesta & Associates, Inc.
2013 In-House Consultant EQT
2014 In-House Consultant Columbia Gas

PROFESSIONAL CERTIFICATIONS

- 3.3 Continuing Education Units for Wetland Delineation – Olentangy Wetland Research Park at Ohio State University
- April 2012 – Applied Fluvial Geomorphology NCTC (Rosgen)
- April 2012 – River Morphology and Applications NCTC (Rosgen)

AREAS OF SPECIALIZATION

Permitting, compliance, collection, identification and analysis of biological data for research via habitat, electrofishing surveys, water sampling, and chemistry analysis. Environmental reporting and permitting. Wetland and stream identification and delineation.

PROFESSIONAL EXPERIENCE

Stream/Wetland Delineation, Permitting, and Mitigation

Served as project manager for environmental permitting for large scale oil and gas projects including roadway improvements, pipeline maintenance and construction, well pad development and other associated projects for the industry. Leads and trains staffing in field work and preparing environmental applications.

Supervised and conducted numerous wetland identifications and delineations for private companies throughout West Virginia, Virginia, Ohio, and Pennsylvania. Work included identification, delineations, and verification process with the United States Army Corps of Engineers (USACE), wetland reporting, permitting, and mitigation.

Met on-site with USACE, West Virginia Department of Environmental Protection for wetland verifications with governmental agencies.

Completed stream and wetland delineations for the construction of Highline Transmission Projects in Pennsylvania, West Virginia, Maryland, and Virginia. Worked with contractors to limit stream and wetland impacts as much as possible.

Supervised and completed stream and wetland delineations for oil and gas companies, including pipeline right-of-way and well layout locations.

Supervised and prepared and submitted numerous USACE Section 404 Applications and WVDEP 401 Applications. Obtained numerous 401 and 404 Permits for various types of projects.

Prepared numerous stream and wetland reports pertaining to oil and gas industry.

Prepared and analyzed field data for state and federal permit applications.

Responsible for Section 7 Consultation of Endangered Species Act, Section 106 Consultation of the National Historic Preservation Act and Section 404 of the Federal Clean Water Act for numerous projects throughout West Virginia. Work includes field reconnaissance and assessment and report writing.

Experienced in consulting with USACE on Nationwide Permits and Individual Permits.

Experienced in completing the West Virginia Stream and Wetland Valuation Metric calculator for mitigation projects.

Conducted after-the-fact delineations with the U.S. Environmental Protection Agency.

Mining

Authored sections of mining permit applications and environmental information documents.

Surface Water Sampling

Conducted surface and groundwater sampling.

GIS

Analyzed longitudinal and cross-sectional data associated with stream profiles.

Acquired skills in operation of GPS equipment.

Oil and Gas

Managed environmental permitting for large scale roadway improvement project across 10 counties throughout West Virginia.

Permitted hundreds of natural gas well pads, pipelines and access road upgrades.

Biological and Sampling

Conducted electrofishing surveys with species identification.

Collected water samples and performed chemical analysis with various instruments.

Conducted benthic macroinvertebrate surveys utilizing procedures described in the USEPA's Rapid Bioassessment Protocol (RBP).

Performed habitat and stream assessments utilizing the standard EPA RBP in freshwater ecosystems.

D. MARK KISER, P.E., L.R.S.

Chief Engineer



EDUCATION

B.S. Civil Engineering, 1984
West Virginia University

EMPLOYMENT HISTORY

1997-Present	Potesta & Associates, Inc.
1995-1997	Terradon Corporation
1984-1995	GAI Consultants

PROFESSIONAL REGISTRATION

- Professional Engineer – West Virginia
- Licensed Remediation Specialist – West Virginia

PROFESSIONAL CERTIFICATION

- Hazardous Waste Site Operations and Superfund
- Worker Protection Training, 40-Hour Training
- Supervisory Training and Annual Refreshers
- Troxler Nuclear Densometer Certification

SERVICE ON BOARDS AND COMMISSIONS

Commissioner – Sissonville Public Service District

AREAS OF SPECIALIZATION

Environmental assessments, environmental sampling and remedial programs, conceptual and final designs for chemical, utility, and municipal solid waste disposal sites, including liner systems, leachate management systems,

stormwater management systems, operational plans, and capping/closure systems, abandoned mine land reclamation projects, sludge stabilization and basin/pond closure projects, environmental permitting, hydrologic and hydraulic analyses, quality assurance/quality control monitoring.

PROFESSIONAL EXPERIENCE

Ridgeline, Inc./Cabela's – Retained by developer and Cabela's to provide civil engineering design services for a new Cabela's store in Charleston, West Virginia:

- ALTA survey
- Subsurface exploration
- Grading plan including balanced cut and fill for the building pad, parking fields, and access roads.
- Stormwater collection system design including curb inlets, catch basins, and culverts.
- Pavement design.
- Utility extension designs including sanitary sewer, potable water, fire service, natural gas, underground electric, underground telephone, and underground cable television.
- Permitting services
- Support for local approvals including approval from Charleston Municipal Planning Commission as a Development of Significant Impact and building permit to allow construction to begin.
- MM-109 permit to allow for connection of the store's new roadway with the existing public roadway.

Fieldcrest Subdivision – Project manager/engineer for development of a nine-lot subdivision in Charleston, West Virginia. Design and permitting/regulatory approvals for infrastructure, including new street, sanitary sewer main, water main, stormwater, electric, telephone, cable, and natural gas. Preparation of drawings/specifications for necessary governmental agency approvals and for solicitation of bids. Inspection and certification of completed sanitary sewer system.

Connell Pointe Subdivision – Project manager/engineer for development of an eleven-lot subdivision in Charleston, West Virginia. Design and permitting and regulatory approvals for infrastructure, including new street, sanitary sewer main, water main, natural gas service, stormwater, electric, telephone, and cable.

Preparation of drawings/specifications for governmental agency approvals and for solicitation of bids. Inspection and certification for completed sanitary sewer systems.

Conner Drive Townhouses – Project manager/engineer for development of 13 townhouse lots just outside of Charleston, West Virginia. Planning, surveying, design, and regulatory approvals for infrastructure, including new street, stormwater management system, sanitary sewer main, water main, electric, natural gas, telephone, and cable.

Gettysburg Subdivision – Project manager/engineer for an 18-lot subdivision located in Kanawha County, West Virginia. Design, surveying, and regulatory approvals for infrastructure, including new street, sanitary sewer main, water main, stormwater management system, electric, natural gas, telephone, and cable. Preparation of drawings/specifications for solicitation of bids. Inspection and certification of the sanitary sewer collection system and pump station.

Yorktowne Subdivision – Project engineer for development and construction phase services for a 50-lot subdivision in Charleston, West Virginia. Design of streets, lots, stormwater management systems, sanitary sewer mains and pump stations, water mains, underground electric, natural gas, telephone, and cable.

City of Charleston – Feasibility study for the replacement of the CSX Ramp in Charleston, West Virginia.

Villages at Coolfont – Project manager for project in Morgan County, West Virginia, which included planning, engineering, and permitting associated with developing a second home community on 1,000 acres near Berkeley Springs, West Virginia. Project included:

- Potable water supply source (wells), treatment plant, storage, and distribution system
- 0.44 MGD MBR wastewater treatment plant and sanitary sewer collection system
- Community roadways and storm sewer systems
- Detailed plans for the water and wastewater treatment plants and the distribution allocation system serving the first 124 homes
- Permits were obtained for the water and wastewater plants

Suncrest Subdivision – Project engineer for development of subdivision in Charleston, West

Virginia. Project included engineering and permitting for a new residential subdivision including roadway, underground electric, telephone, cable, water, sanitary sewer, and storm water. Sanitary sewer system was designed, constructed, and monitored under the terms of an alternate mainline extension agreement with the Charleston Sanitary Board.

Business and Industrial Development Corporation – Preparation of Utility Extension and Roadway Paving Plans for Southridge Centre - Phase 2 area. Project included preparation of bidding/construction drawings to provide natural gas, water, sanitary sewer, telephone, and cable television serving four commercial lots and a 50-lot proposed subdivision. All utilities were underground. The length of the project was approximately ½ mile. The project also included roadway paving and stormwater drainage.

Mixed-Use Industrial Park – Development of a conceptual development plan for a mixed-use industrial park. The evaluation included developing preliminary alignments for two access roadways including earthwork requirements, drainage, subbase, and paving with preliminary cost estimates. Total length of road was over 5 miles. The evaluation also included preliminary layout of water and sewer service for a proposed 400-acre development.

Plasma Processing Corporation – Preparation of permit to construct and site development plan for a secondary aluminum processing facility startup in Jackson County, West Virginia.

Utility Relocation Plans – Required for site development, waterline, and sewer construction projects. Projects included determination of utility locations by records review, utility contacts, and surveying. Designs were prepared including locations, details, and pavement replacement. Design also included obtaining approvals from West Virginia Division of Highways and the owners of the utilities.

Abandoned Mine Lands

West Virginia Division of Environmental Protection (WVDEP) Abandoned Mine Lands (AML) Reclamation – Project engineer/project manager for open-end contract from 1988 through 1995. Continued after 1995 with AML projects for WVDEP AML including reclamation designs, preparation of

plans, specifications, bid documents, and permitting. Projects included:

- Duncan Hill No. 1 and No. 2 Subsidence
- Urso Subsidence
- Jonben Subsidence
- Doug Gray Subsidence
- Turner Douglas Complex
- Omar Refuse Piles (project won reclamation of the year award)
- Bear Run Refuse (project won 1994 Ducks Unlimited award)
- Kimble Refuse Pile (project won 1995 southern reclamation award)
- Vivian Refuse Pile
- Summerlee Refuse Pile
- Godby Branch Water Extension
- Williamson (Elias) Landslide
- Lefthand Fork Burning Refuse
- Belle Landslide
- Harris Acid Mine Drainage
- Numerous Phase I and Phase II Water Quality Studies/Survey
- Williamson (Hatfield) Landslide
- Taylorville (Cantrell) Drainage
- Sundial Refuse
- Sundial (Hatfield) Refuse Piles
- St. John's Road Subsidence
- Rachel Refuse
- Putney Impoundment
- Pringle Run No. 2
- Peach Ridge Complex
- Mountain Run Refuse and Portals
- Mill Creek Refuse Pile
- Measle Fork Refuse
- Marmet (Wells Drive) Landslide
- Marmet (Clark) Drainage
- MacArthur Mine Subsidence
- MacArthur Phase 2 Subsidence
- Little Whitestick Refuse
- Lando (Edwards) Drainage
- Kopperston (John's Branch) Refuse
- John's Branch Coal Refuse Dam (Kopperston)
- Jessop Highway #10
- High Coal Tipple
- Harris AMD
- Gray and Laquinta Subsidence
- Grass Run Refuse
- Godby Branch Waterline Extension
- Georges Creek Portals
- Georges Creek (Lucas) Rockslide

- Garrison Complex
- Flipping Hollow Complex
- Fairmont East Mine Drainage
- East Lynn II
- Crany Mine Dump
- Courtright Highwall
- Cora Mine Drainage No. II
- Charleston (Ratcliffe) Landslide
- Cassity Fork Waterline Extension
- Camp Mohonegan Regrade
- Buffalo Creek No. 5 Refuse
- Borderland (Matney) Portals
- Beckley Subsidence
- Allen AMD

WVDEP-AML – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for a half-mile water line extension to serve Beaver Creek near Junior in Randolph County.

WVDEP-AML – Management of four Phase II water studies and five Phase I water studies to determine if water supplies had been affected by coal mining. Work included resident interviews, mine map searches, area reconnaissance, obtaining water samples, reviewing water analysis data, preparing conceptual designs and associated costs and preparation of summary report.

Buffalo Creek No. 5 – Subsurface investigation, surveying coal refuse reprocessing evaluation and report, and design of reclamation plan to stabilize and approximately 15-acre refuse pile at Buffalo Creek No. 5 in Marion County, West Virginia. Developed plans, specifications, cost estimate, and calculations brief for drainage control and regrading plan.

Reclamation Plan – Subsurface investigation, surveying, and design for reclamation of three coal refuse piles and six mine entries. Design included replacement of a water well and related supply piping for the Town of Kimball. Completed preparation of plans, specifications, cost estimate, coal refuse report, West Virginia Department of Health permit for new well, and other supporting documents for reclaiming this large site with over ½ million cubic yards of regrading.

Reclamation Plan – Subsurface investigation, surveying, coal refuse reprocessing evaluation, water quality monitoring, and design of a reclamation plan for a coal refuse pile, unreclaimed highwalls, and slurry and

water treatment ponds in Lewis County, West Virginia. Plans, specifications, cost estimates, and calculations brief were completed for the project.

Environmental Assessments/Impact Statements

Rhone-Poulenc AG Company – Management and oversight of environmental assessment to identify any liabilities or soil/water degradation for a proposed industrial solid waste landfill. Investigation included drilling, sampling, monitoring well sampling, site reconnaissance, and historic records research to establish baseline soils and groundwater conditions. Results presented in a report.

West Virginia Division of Highways (WVDOH) – Environmental Assessment for a 1.25-mile proposed four-lane divided highway in Bridgeport, West Virginia.

WVDOH – Environmental Impact Statement (EIS) for proposed Route 19 upgrade from Summersville, West Virginia to Interstate 79 in Braxton County, West Virginia. Project included evaluation of three alternatives over approximately 25- mile length. Responsibilities included hazardous waste section collection of general data used by other scientists, field reviews, and public meeting participation.

Assessment of Environmental and Reclamation Liabilities – Associated with over 40 surface mine permits in western Virginia. Evaluation included PCB concerns, reclamation costs, underground and aboveground storage tanks, and acid mine drainage.

Massey Coal Service, Inc. – Assessment of environmental liabilities associated with a large tract of property including over 25 permitted mines and a coal preparation plant. Investigation included a review of permits and requirements, past environmental compliance record, walkover of each site, and development of estimated reclamation costs for each site. Report prepared to document results of the liability assessment.

Environmental Assessments – Completion of environmental assessments and a preliminary design report for two inactive commercial solid waste disposal landfills located in Kanawha and Wyoming County, West Virginia. The environmental assessment included completion of a groundwater user's survey for residents located within ½ mile of each facility, drilling shallow groundwater monitoring wells to monitor flow along

the soil/bedrock interface downgradient of each landfill, an extensive geotechnical soils/rock investigation, assessment of each facilities compliance with the solid waste management rules, and developing recommendations for a preliminary closure plan.

Mining

Eastern Associated Coal Corporation – Coal ash utilization study including five mining operations and four coal ash sources in Virginia and West Virginia. Study evaluated both surface and underground beneficial uses of ash to neutralize acidic drainage.

Permitting – Project manager/engineer for the preparation of coal ash utilization permits for West Virginia mining operations. Permits included placing ash in the embankment of refuse disposal sites and placing ash with spoil backfill.

- Elk Run Coal Company
- Appalachian Mining, Inc.
- Peerless Eagle Coal Company
- Rawl Sales and Processing Company

Pace Carbon Fuels, LLC. – Consulting and permitting for the development of seven coal-based synthetic fuel manufacturing plants in West Virginia, Indiana, Kentucky, and Illinois. Project included obtaining pre-construction and operating permits for air, water and mining for the manufacturing plants and the feedstock coal recovery operations. Assignments included permit application preparation, assistance in locating and evaluating coal feedstock sites, construction monitoring, Phase 1 environmental site assessments, and other miscellaneous engineering consulting functions.

Pennsylvania Electric Company – Yearly construction designs for lined coal ash and coal refuse disposal sites at the Keystone and Conemaugh power stations, including a synthetic liner system, groundwater and surface-water control, leachate collection, landfill development, and haul road design. Construction quantity and cost estimates and development of IBM-PC software for evaluating the storage capacity of the disposal sites.

Landfills

DuPont Washington Works – Project Manager responsible for design, preparation of construction

documents, and construction documents, and construction quality assurance monitoring for a 6.2-acre expansion of a piggyback of a leachate collection system at an industrial waste landfill.

Eastern Environmental Services, Inc. – Project engineer/project manager for finalizing a permit application for the S&S Landfill near Clarksburg, West Virginia. Components of the plan included a detailed staging and closure plan to comply with sediment control and leachate storage requirements. Successfully represented the landfill in a permit appeal hearing before the Water Resources Board. Prepared two construction/bid packages for constructing the initial 10 acres of the landfill.

Cytec Industries – Quality assurance/quality control monitoring for closure of a 10-acre SWMU containing biological treatment sludge. The contents of the basin were stabilized by mechanical mixing. Activities included supervision of testing, data evaluation, and a revised interim grading and drainage plan. Report and certification provided for WVDEP-OWM.

Cytec Industries – Closure plan and permit application for closure of a 5-acre industrial waste landfill. Steep slopes over a portion of the landfill necessitated the design of an innovative cap system and leachate collection system. Project also included closure and capping of a small pit containing tar residue.

Northfork Landfill – Responsible for detailed hydrogeologic investigation and preparation of a major portion of the WVDEP Part A Solid Waste Disposal Permit Application for the Northfork Landfill near Wheeling, West Virginia. Project included field reconnaissance and mapping of existing site conditions, rock corings, test pits, laboratory analysis of soils for potential construction materials, installation of four monitoring wells, and the corresponding analysis and evaluation of data for completing the Part A Application.

Sycamore Landfill – Responsible for hydrogeologic investigation and preparation of the WVDEP Part A Solid Waste Disposal Permit Application for the Sycamore Scenic Landfill in Putnam County, West Virginia. Work included coring, test pit, and laboratory analysis of soils; review of existing groundwater data; and analysis and evaluation of data for completing the Part A Application.

Brooke County Sanitary Landfill – Project Manager responsible for construction quality assurance monitoring for three landfill expansions at Brooke County Sanitary Landfill, including 6.5 acres of composite liner.

Wetzel County Landfill – Project Manager responsible for construction quality assurance monitoring for 0.8-acre composite liner expansion.

Pocahontas County Landfill – Project Manager/Project Engineer for design of composite liner system expansion, design and construction quality assurance for a 2-acre final landfill cap, and design of a new access road.

Chambers Development Company – Preparation of solid waste disposal permit applications for the Monroeville Landfill, Monroeville, Pennsylvania, and the Southern Alleghenies Landfill, Cambria County, Pennsylvania, both of which include a double synthetic liner system combined with a drainage net leak detection system to conform to Pennsylvania DER regulations.

WVDEP Landfill Closure Assistance Program – Project manager/engineer from 1997 through 2002. Responsible for conceptual design, field investigation, construction drawings, specifications, permit applications, etc., for the following projects:

- Wyoming County Landfill
- Jackson County Landfill
- Kanawha Western Landfill
- Monongalia County Sanitary Landfill
- Fayette County Landfill
- Fleming Sanitary Landfill

QA/QC monitoring oversight for a municipal waste landfill in Tazwell County, Virginia.

Stabilization and Closure – Design, preparation of drawings, technical specifications, and contract/bid documents, construction monitoring, air monitoring, sludge sampling and analysis, review and approval of a detailed health and safety plan, permitting, and other miscellaneous engineering services for the stabilization and closure of a 3-acre sludge basin and a 1-acre sludge pond. The project included management of a pilot-scale demonstration, procurement of stabilization reagents from multiple providers, and development of an adjacent soil

borrow area.

Capping and Closure – Design, preparation of drawings, technical specifications, contractor's bid sheet, engineer's cost estimate, contract, and cap acceptability evaluation, evaluation of contractor bids, and construction monitoring associated with the capping and closure of a 2.5-acre cell of an industrial waste landfill facility. Cap included a multi-layer geocomposite system to minimize infiltration and the production and leachate to improve the areas groundwater quality.

Construction of Pond and Landfill Liner – Final design and preparation of construction drawings, detailed technical specifications, and engineer's construction cost estimate for the construction of a 1.9- million-gallon double-lined pond and 5 acres of a landfill liner system. This project included development of an ultimate facility layout plan, a two-year detailed development plan, and construction monitoring. Project also included negotiations with regulatory agency to obtain approval of the permit.

Response to regulatory agency review comments and redesign of a pond liner system and piggyback landfill liner system for a 20-acre landfill in West Virginia.

DuPont Environmental Remediation Services – Consulting regarding the design of a final cover/cap for an industrial waste landfill located in West Virginia.

West Virginia Public Service Commission – Site reconnaissance, development of alternative capping and closure systems, and preparation of engineer's cost estimates for the closure of two West Virginia municipal waste landfills in support of rate making testimony and hearings.

American Cyanamid Company – Project manager and engineer for independent quality assurance/quality control monitoring associated with closure of a three-acre SWMU consisting of a waste impoundment. Project included construction of an earthen buttress to improve slope stability, in-place waste stabilization using fly ash and kiln dust, and construction of a RCRA cap. Responsible for field design revisions to overcome problems, conformance testing, and preparation of certifications and a summary report. Project included sampling and analysis of raw and stabilized sludge.

American Cyanamid Company – Coordination of field

activities associated with construction monitoring and laboratory testing for RCRA hazardous waste impoundment (the first permitted and constructed in EPA Region III) in Willow Island, West Virginia, including earth moving, construction of a soil-bentonite liner, monitoring of three, sealed double-ring infiltrometers, and construction of an HDPE double-lined impoundment.

Pennsylvania Electric Company – Field (construction) monitoring for development of a residual waste landfill including compaction testing for heavy earth moving, synthetic (PVC) liner installation, concrete testing, and other miscellaneous testing.

Virginia Power Company – Consultant for site development and construction of a fly ash disposal facility including a review of site operations, developing a maintenance program, compaction testing and review, and problem shooting.

Rhone-Poulenc Ag Company – Design and permitting for a proposed industrial solid waste landfill. Project included complete hydrogeologic evaluation including several borings and installation of seven monitoring wells; documentation of soils, geology, water quality and hydrogeology; detailed site design of leachate ponds, liner system, storm water collection system, access road, and capping/closure system. Multi-volume permit application prepared including Operations Manual, Quality Assurance/Quality Control Plan, Technical Specifications, Permit Application, and Design Drawings.

Rhone-Poulenc Ag Company – Leachate Minimization Study for a RCRA Hazardous Waste Landfill. Project included assessment of existing landfill operation and recommendations to reduce quantity of contaminated runoff from over 8 million gallons per year (MGY) to between 2 and 3 MGY. Detailed staging and operating plan, storm water management plan, and cost estimates prepared.

American Cyanamid Company – Closure plan and permit application for closure of a three-acre surface impoundment containing sludge and tar. Stability concerns for an existing embankment containing the waste lead to the development of a lightweight cap. Subsurface investigation and field surveying completed. Closure application as required by the West Virginia Division of Environmental Protection provided.

Sludge Sampling – Soundings and sampling of three basins containing sludge. Two basins contained sludge from secondary biological treatment of industrial wastewater. One basin contained petroleum product sludges. Sludge quantities determined from soundings and cross sections prepared.

Samples obtained for laboratory analysis to characterize wastes.

- Rhone-Poulenc Ag Company
- Ashland Petroleum Company

Monongalia County Sanitary Landfill – Engineer responsible for expansions, planning, and upgrades for the Monongalia County Sanitary Landfill from 1990 through 1992. Activities included:

- Three expansions (seven acres total) of the landfill liner and leachate collection system, including grading, groundwater collection drains, landfill liner system and leachate drains, protective cover, and surface drainage control
- Construction monitoring
- Certification of landfill expansions
- Construction of a 1.6-million-gallon leachate storage basin, including clay liner, double synthetic liner, synthetic drainage layer, protective cover, and drainage control devices
- Annual landfill volume reports, including surveyed cross sections
- Two borrow area investigations to identify clay liner sources
- Feasibility study for expansion and continued operation of the facility
- Final closure plan for the facility including a multi-layered cap and drainage control plan

Rhone-Poulenc AG Company – Evaluation of an emergency fly ash pond for a chemical plant in Institute, West Virginia. Recommendations, including conceptual design drawings and an engineer's cost estimate, to increase the settling efficiency of the pond. Special design elements, including a polymer feed system, submerged manifold pipe, splitter dike, and an overflow weir.

Hampton-Clarke, Inc. – Project Manager for Independent Quality Assurance Testing (IQAT) services for removal of contaminated soils and placing clean soil backfill at the site of a former cullet pile disposal area.

Stormwater

Expert Witness – Retained for the plaintiff damaged as a result of flooding caused by lack of maintenance at a culvert system in Westmoreland, Wayne County, West Virginia.

Stormwater Drainage Plans – Site development projects including pre- and post- development discharges, design of sediment control devices, preparation of stormwater general permit application, and consulting for numerous construction projects in West Virginia.

Stormwater Evaluation – Evaluation of stormwater drainage system (culverts and channels) to alleviate flooding problems for a church in Kanawha County, West Virginia. Project included computer modeling to identify culvert capacities and to identify repair options.

Expert Witness – Retained to support a property owner damaged as a result of flooding caused by downstream obstructions. Reviewed regulatory agency files, conducted site inspections, evaluated possible remedial measures, and provided support in anticipation of litigation.

Expert witness – Retained for plaintiff damaged as a result of flooding from upstream construction. Visited site to observe problem areas, reviewed construction practices/procedures, reviewed regulatory permits, and provided testimony as to the cause of flooding.

Developed stormwater management plans, including calculation of peak runoff rates, storm volumes, and design of stormwater management devices including culverts, ditches, sumps, ponds, principal pipe spillways, and emergency spillways for the following projects:

- Site development projects including commercial, retail, and industrial sites ranging from ¼ acre to more than 100 acres.
- Abandoned mine lands reclamation projects, including landslides, refuse piles, slurry ponds, and subsidence control projects.
- Commercial and industrial waste landfill projects.
- Roadway design projects.
- Other projects involving the disturbance of the ground surface.

Water Lines, Water Storage Tanks, and Water Treatment Plants

WVDEP-AML – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for six-mile water line extension including fire protection. Included in project were 90,000-gallon water tank, booster station, and pressure relief valves. Extension tied into Norton Harding Jintown PSD System and served town of Cassity in Randolph County.

Design for waterline extension projects including preparation of construction drawings, specifications, and engineer's cost estimates for WVDEP- AML.

- Cassity Fork Waterline
- Beaver Creek Waterline Extension
- Godby Branch Waterline Extension

Design, preparation of construction drawings, preparation of permit applications, and other related activities for the construction of waterline projects. Line sizes ranged from 16 inches to 2 inches. Materials of construction included polyvinyl chloride and ductile iron pipe. Drawings included planimetric maps, topographic maps, and aerial photograph formats to depict proposed construction. Permit applications included Bureau of Public Health, Public lands Corporation Stream Activity Permits, Division of Highways Occupancy Permits, and General Storm Water NPDES Construction.

- West Virginia American Water (WVAW) – Cabell County 2000 Project consisting of 23 miles of new waterline construction
- WVAW – Poca River Road Waterline Extension consisting of 13 miles of new waterline construction
- WVAW – Route 60 Contract 3 Waterline Extension consisting of 3 miles of new waterline construction
- WVAW – Buff Creek/Trace Fork Waterline Extension consisting of 6 miles of new waterline construction
- WVAW – Route 60 Contract 4 Waterline Extension, consisting of 2 miles of new waterline construction
- Yorktowne Subdivision – Waterline extension serving a 50-lot subdivision consisting of 3,000 linear feet

ESA (Phase I and II)

Numerous Phase I Environmental Site Assessments including reclamation liability assessments for mining

and industrial properties in West Virginia and Kentucky. Projects typically focused on solid waste disposal practices, potential acid mine drainage discharges, underground storage tank status, areas of hydrocarbon soil contamination, PCB transformer concerns, and other environmental liabilities.

Phase II Environmental Site Assessment – Abandoned mining complex located in Fayette County, West Virginia.

- The new owners wished to identify any liabilities and determine approximate clean-up costs for negotiations with the previous owners.
- The areas evaluated included two aerial tram head houses, a drum storage area, truck maintenance garage, mine machinery repair shop, two commercial properties, a lamp house, and other storage areas.
- Numerous areas of petroleum hydrocarbon contamination were identified, and the extent of contamination documented.
- An on-site laboratory was used to expedite testing and establishing the boundary of areas requiring remediation.
- The results of the investigation were summarized in a report, including a detailed description of sampling and laboratory analysis methods, drawings showing sample locations, laboratory results, estimated volumes of contaminated soils, and recommendations for cleanup.

West Virginia Regional Jail and Correctional Facility Authority – Phase I Environmental Site Assessment to document potential liability for a tract being considered for a regional jail site in Kanawha County, West Virginia. Activities included historic records search, interviews, site reconnaissance and preparation of a report documenting the findings.

DiMucci Development – Phase I Environmental Site Assessment for property proposed for development as a strip mall.

The MultiCare Companies, Inc. – Completion of eight Phase I Environmental Site Assessments for nursing and rehabilitation care facilities in West Virginia.

Virginia Electric Power Company – Assistance with site design and engineer's construction cost estimate for the remedial design of a CERCLIS waste disposal

facility.

Phase I Environmental Site Assessments – Feedstock recovery sites associated with three coal-based synthetic fuel manufacturing plants. The feedstock recovery sites included numerous coal waste slurry impoundments, dry refuse piles, and mixed refuse disposal areas. Assessments focused on potential acid mine drainage problems, former waste disposal areas, and other mining-related environmental liabilities. A report was prepared detailing the findings for each site.

Storage Tanks

Columbia Gas Transmission – Project manager for completion of over 350 AST Registrations, Inspections/Certifications, and site-specific Spill Prevention Response Plans for 40 facilities:

- Followed the Aboveground Storage Tank Act §22-30 Title 47 Interpretive Rule Series 62 and the Draft Emergency Rule additionally conferring with the WVDEP to establish accurate classification and compliance
- Met all regulatory deadlines
- Reviewed comprehensive electronic documentation comprising of completed inspection sheets, photographs, detailed deficiencies
- Provided recommendations and schedule for abatement for deficient secondary containment structures

Rhone-Poulenc AG Company – Geotechnical and environmental investigation for two proposed above-ground reinforced concrete tanks to serve as secondary wastewater treatment unit. Investigation included soil drilling, sampling, laboratory analysis for engineering properties, and analysis for contamination. Field survey completed to locate existing structures. Report prepared outlining soils/geology, environmental concerns, and foundation recommendations.

Closure of Aboveground RCRA Storage Tanks – Closure services for 13 aboveground RCRA storage tanks included review of agency approved closure plan to determine compliance items, visual inspection of tank interiors and earthen containment berm areas, review of rinsate analyses, review of soils testing analysis from berm areas, and preparation of closure documentation and certification.

Cannelton, Inc. – Abandoned underground storage tank investigation including sampling of tank contents, geoprobe investigation, and field and laboratory analysis of soil samples.

Sewer Lines and WWTPs

Fleming Landfill – Project manager/project engineer for the Fleming Landfill Sanitary Sewer Extension project in Kanawha County, West Virginia. Project included design, permitting, construction monitoring, and certification of 9,900 linear feet of gravity and force main sanitary sewer, a new duplex pump station, and rehabilitation/upgrade of an existing pump station. The construction contract was over \$1 million. The completed sewer extension was turned over from the West Virginia Department of Environmental Protection to the Sissonville Public Service District for ownership and operations.

Timberwolf Development Corporation – Project engineer for sanitary sewer system including 8- inch gravity sewer, pump station, and force main sewer serving the Gettysburg Subdivision in Charleston, West Virginia. Project included an alternate mainline extension agreement with Charleston Sanitary Board, construction monitoring, surveying, road design and subdivision plans.

Project manager/engineer for an industrial wastewater sewer extension. Project included design engineering, permitting, and construction monitoring associated with a 5-million-gallon, double-lined storage impoundment, duplex pump station with 70 horsepower pumps, and 5,200 linear feet of force main sewer in Monongalia County, West Virginia.

West Virginia Department of Environmental Protection – Design, permitting, and construction monitoring associated with a 138,000-gallon double containment storage tank, duplex pump station, and force main piping associated with closure of the Jackson County Sanitary Landfill near Ripley, West Virginia.

Oil and Gas

Columbia Gas Transmission Corporation – Project Manager for in-house consulting services provided for environmental reports and permit applications for natural gas pipeline transmission projects.

Columbia Gas Transmission – Field reconnaissance of approximately 16 miles of pipeline route, preparation of erosion and sediment control measures, and preparation of stream crossing permits for the NJET project.

Spill Prevention, Control & Countermeasure Plans

Union Carbide Corporation, South Charleston Plant – Audit of chemical manufacturing plant to determine compliance with the facility Spill Prevention Control and Countermeasures (SPCC) plan. Project included review of SPCC plan prepared by facility staff, on-site inspection of over 50 storage areas to ascertain compliance with the SPCC plan and pertinent regulations, preparation of a list of observed deficiencies, and certification of the SPCC plan by a professional engineer.

Stream/Wetland Delineation, Permitting, and Mitigation

Columbia Gas Transmission Corporation – Design of stream stabilization and restoration plan for a section of East Fork of Queer Creek in Hocking County, Ohio. Project included obtaining 401/404 certification and preparation of a detailed construction plan.



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting.

Know Ye That The State Board of Registration for Professional Engineers, of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

David M. Kiser

DOES, IN PURSUANCE OF AUTHORITY VESTED IN IT

by law, hereby certify that he, having submitted satisfactory evidence of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number [REDACTED]

To Hold and use such title in the practice of his profession, subject to the conditions prescribed by law.



Given under the hand and the Seal of the Board at the Capitol in the City of Charleston.

this 15th day of March in the year of our Lord One Thousand Nine Hundred and Ninety and of the State the One Hundred Twenty-sixth.

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

[Signature]

Secretary

Kenneth H. Means

By

[Signature]

President

[Signature]



Geocomputation, GIScience Seminar, Digital Image Processing, Analysis of Biological Data, Advanced Quantitative and Qualitative Methods

AREAS OF SPECIALIZATION

Watershed approach stream and wetland investigations/delineations throughout West Virginia. Utilization of site habitat characterization through site assessments using state and federal methodologies. Experience with stream and wetland restoration/mitigation projects, preparation of NEPA information for large surface disturbances where individual permits were required by the Army Corps of Engineers (COE).

PROFESSIONAL EXPERIENCE

GIS

Extensive use of ArcGIS creating, integrating, and maintaining Trimble GPS data and/or maps that can be combined with geographically referenced data and can relate different types of data such as socioeconomic, land use, land cover, and other environmental data.

Utilization of spatial analyst applications for delineation of watershed areas and support for after-the-fact delineations.

Cumulative impacts assessment (mining, oil and gas, and timbering) for various projects (area and linear footage of streams), soil mapping, and other project mapping needs such as creating, integrating, and maintaining spatial data and/or maps that can be combined with geographically referenced data and can relate different types of data such as socioeconomic, land use, land cover, and other environmental data.

Utilization of national databases to generate baseline mapping for project planning.

Utilization of historic aerials to characterize land use changes over decades, as well as stream and wetland impacts for after-the-fact projects.

Routinely integrate the use of ArcGIS into projects that require a high level of visual interpretation and analysis, particularly for projects that require a broad scope, such as evaluations that must comply with the National Environmental Policy Act.

EDUCATION

M.A. Geography/GIScience, 2011
Appalachian State University

B.S. Biology/Ecology, 2008
Appalachian State University

EMPLOYMENT HISTORY

2011-Present Potesta & Associates, Inc.
2011 North Carolina Department of
Environment and Natural Resources
2010-2011 Appalachian State University

TRAINING/RELEVANT COURSE WORK

- 2015 – Rosgen Level III- River Restoration and Natural Channel Design
- 2014 – Rosgen Level I- Applied Fluvial Geomorphology, Rosgen Level II- River Morphology and Applications
- April 2012 – Benthic Macroinvertebrate Surveying and Rapid Bioassessment Protocol Methods (WVDEP)
- March 2012 – Wetland Delineation and Regional Supplement Updates (SWAMP School)
- August 2004-May 2008 (course work) – Botany, Zoology, Ecology, Mammology, Physical Geography, Hydrology, Vegetation, Soils, and Landforms
- August 2008-August 2011 (course work) – Introduction to GIS, Advanced GIS, Principles of

Experienced in utilization of Trimble products, including sub-meter accuracy GPS units, Terrasync and GPS Pathfinder software.

Surface Water Sampling

Extensive experience in collecting surface water samples for chemical analysis and collecting supplemental flow data using state and federal guidelines.

Experience utilizing Microsoft Access databases and data management strategies for water quality data collection and analysis.

Experience in statistical analysis and various statistical software packages using water quality data.

Stream/Wetland Delineation, Permitting, and Mitigation

Rapid Bioassessment Protocol (RBP). Completed site habitat characterization using RBP, Rosgen-based applications, and EMAP procedures.

Experience in longitudinal and cross-sectional stream surveying, as well as collection of morphological and stream condition data.

Preparation of environmental permits and associated documents (i.e., environmental information documents, special conditions reports, compensatory mitigation plans, aquatic ecosystem protection plans, jurisdictional determination reports, and benthic macroinvertebrate reports) for individual 404 permits for large-scale disturbances.

Conducted wetland/stream characterizations and delineations. Experience determining stream status (perennial, intermittent, or ephemeral) utilizing stream channel indicators.

Experience determining jurisdictional and isolated streams and wetlands in atypical field conditions, as well as after-the-fact stream/wetland impacts.

Benthics

Collection and preservation of benthic macroinvertebrate samples. Preparation of benthic macroinvertebrate reports through data analysis and the utilization of various benthic macroinvertebrate metrics outlined by state and federal agencies.