



Teah E. Gray, WPIT

Senior Environmental Technician

Teah is experienced in data collection, data analysis, report preparation, watershed assessment, wetland delineation, utilization of global positioning system (GPS) technology, geographical information systems (GIS), and completing environmental permitting documents. Her primary responsibilities include program management for the Countywide Action Plans for seven Conservation Districts within the Chesapeake Bay Watershed, data management for Best Management Practice tracking and reporting, and administration of multiple grant applications focusing on improved water quality. Teah is knowledgeable in the use of GPS technology to collect an array of data that is imported into ArcGIS for both mapping and analysis as well as the utilization of multiple database interfaces to track and manage collected datasets. She has

completed field studies for botanical surveys, threatened and endangered species surveys, wetland and stream monitoring, habitat surveys, and pre- and post-construction invasive species studies.

Years with LDG: 5
Years with other Firms: 0

EDUCATION

Mansfield University of Pennsylvania, Bachelor of Science, Geoscience Environmental Science, Minor in Watershed Management, 2018

CERTIFICATES

Wetland Professional in Training, 2019

PROJECT EXPERIENCE

Countywide Action Plans (CAPs) Various Counties, PA. *Bradford County Conservation District/Lackawanna County Conservation District.* Senior Environmental Technician. Completed planning logistics and data analysis for Countywide Action Plan development for six counties within the Chesapeake Bay watershed. Data analysis was completed for land use, parcel size, watershed impairment, and vegetative type and density layers in order to identify potential project implementation areas, evaluate project necessity, and to establish project priorities for each county.

LDG was responsible for developing and coordinating the Countywide Action Plans (CAP) for Potter, Tioga, Bradford, Susquehanna, Lackawanna, and Luzerne Counties within Pennsylvania's Chesapeake Bay watershed. The completion of this background data analysis assisted with CAP planning and development to outline how each county will achieve their nitrogen and phosphorus reduction targets. The CAP goals included establishing a CAP Planning Team (CPT) consisting of public, private, and nonprofit organizations to guide water quality planning and implementation efforts; and understanding the location, source, and extent of nitrogen and phosphorus pollution in the county. Each CAP was completed to aid in developing policies and projects to improve water quality in local waterways and the Chesapeake Bay by reducing the nitrogen and phosphorus pollutant loads. LDG was responsible for identifying stakeholders, reviewing available tools and background data, detecting possible projects, identifying potential funding partnerships, and developing the CAP documentation and goals for each county.

Best Management Practice Verification, GIS Platform Development and Remote Sensing Various Locations, PA. *PA Department of Environmental Protection.* Senior Environmental Technician. Assisted with development of the BMP verification GIS platform to provide conservation districts within the Chesapeake Bay watershed the ability collect and track BMPs across multiple landscapes. The GIS portal was created utilizing aerial imagery, land use data, parcel data, hydrology, and roadways to allow for BMP verification sites to be identified via remote sensing practices followed by field verification for increased accuracy. Within the GIS portal, a landuse data layer as well as parcel data was utilized to identify areas that each county prioritized for BMP identification and practice reporting. Areas commonly identified were specific land use types related to agricultural practices or forested land, as well as parcel size for areas of increased acreage for practice implementation or likelihood of farming practices.



Utilization of these data sets allowed for improved accuracy in remote sensing capabilities and increased field verification assurance rates. Field data was collected with a custom-built Survey123 data form and then recorded into the DEP tracking platform Practice Keeper for calculated nutrient and sediment reduction rates.

LDG worked with local stakeholders in each county to document projects and plans with creditable BMPs, including those that have been completed, are currently underway, or are in the planning phases. LDG collected and reported applicable data parameters such as load reductions, location, area, and type of installation for BMPs identified or implemented in documents such as MS4 pollution reduction plans, watershed conservation plans and related assessments, and agricultural BMPs reported in survey instruments.

Abandoned Mine Land Reclamation, Various Locations, PA. *Bureau of Abandoned Mine Reclamation (BAMR).* Senior Environmental Technician. Assisted with the identification of potential AML reclamation sites within PA State Game Lands property. Identified known impairment sites within the property that correlated with BAMR priorities to determine grant application feasibility. Overall reclamation site review was completed through the utilization of multiple mapping interfaces and databases to determine site background, existing and historical land use, and reclamation status.

LDG is providing professional investigation, planning, design, design oversight, permitting services, feasibility studies, geotechnical, geophysical investigations, construction oversight, and other technical services as required, for the reclamation of abandoned mine lands (AML) and associated mine-water impacts. Services include, but are not limited to, surface mine reclamation, mine fire control, and recommending efficient and cost-effective reclamation approaches, mine subsidence control, closure of mine openings, waterline extension/water supply replacement, abandoned mine drainage (AMD) remediation, design of active and passive AMD treatment facilities, evaluation, operation, monitoring, maintenance, and/or rehabilitation of existing passive and active AMD treatment systems.

Agricultural Planning Reimbursement Program, PA. *PA Department of Environmental Protection.* Environmental Technician. Provided agricultural plan and reimbursement submission package review for completeness as well as data management of application materials for application tracking. Completed Agricultural Plan Entry into the DEP tracking platform Practice Keeper for Statewide database. LDG provided program management for the Agricultural Planning Reimbursement Program in north central and northeast Pennsylvania for the Pennsylvania Department of Environmental Protection (PADEP). The funding program allowed agricultural operators in Pennsylvania's Chesapeake Bay watershed to receive reimbursements for agricultural plans they implemented to support nutrient reduction in the watershed. LDG generated complete application packages and provided an administrative review following the guidelines used by PADEP.

GIS Mapping and Data Management. Teah's responsibilities include generation of maps for project sites, client parcel mapping, botanical habitat mapping, environmentally sensitive areas, and state and federal permitting documents. Created, managed, and updated ArcGIS datasets for multiple clients and projects. Experience in developing mapping tools to evaluate project feasibility for various projects through the analysis of data sets such as land use, hydrology, environmental justice areas, aquatic impairment, soil types, etc.

NON-LDG PROJECT EXPERIENCE

Georgia Sea Turtle Center, Research Technician, Jekyll Island, GA. Intern. May-August 2017. Completed threatened species monitoring. Assisted in the collection of field data and analysis including, skin biopsy samples, species morphometrics, and habitat assessment. Entered and proofed data collection records for internal and national databases.



PROFESSIONAL DEVELOPMENT

Wetland Delineation and Regional Supplement Training – 36 hours of field and classroom instruction, 2019

Fundamental Hydric Soils Course – Soil Hub – 2020