

MODIFIED DOTD FORM: 24-102

RPC REQUEST FOR PROPOSALS (RFP)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

Please read carefully, as this form differs from Standard Form DOTD 24-102. **Subconsultants should respond only to questions 1-9 and 16-19, and these responses should be labeled by firm and included as attachments to of the Prime’s submittal.**

ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

1. Contract title as shown in the advertisement	Flood Risk Assessment: Geospatial Dataset Development
2. Contract number(s) as shown in the advertisement	LWICB
3. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	GEOACE LLC
4. Prime consultant? (Y/N)	Y
5. Consultant mailing address	7090 Blacklick Eastern Rd NW, Pickerington, OH 43147
6. Consultant physical address (existing or to be established, if location is used as an evaluation criteria)	7090 Blacklick Eastern Rd NW, Pickerington, OH 43147
7. Name, title, phone number, and email address of consultant’s contract point of contact	Aaron Laver, CTO, (419) 262-2193, aaron@geoace.net
8. Name, title, phone number, and email address of the official with signing authority for this proposal	Aaron Laver, CTO, (419) 262-2193, aaron@geoace.net

9. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. RPC reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.

Signature (shall be the same person as #9):

Aaron Laver

[Aaron Laver \(Jan 12, 2026 13:48:57 EST\)](#)

Date: Jan 12, 2026

10. If a Disadvantaged Business Enterprise (DBE) is participating in the project team, indicate which firm(s) are DBEs and their percentage of the contract. If a firm is not certified as a DBE in Louisiana, please indicate the state where they are certified.

Firm(s):

BAYOU
ROUGE Environmental
& Planning

Firm(s)' %: 22

11. Firm(s) Size:

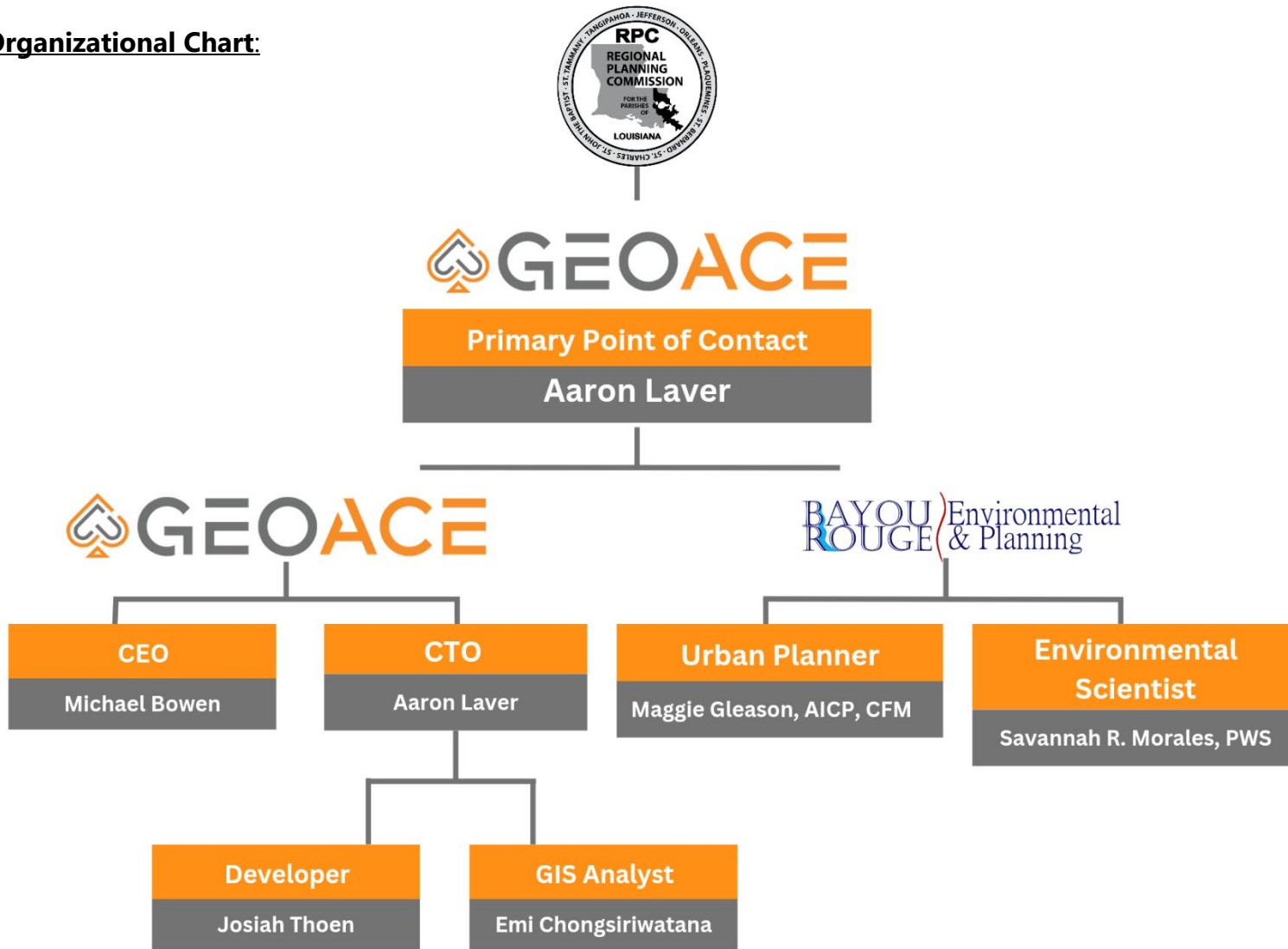
For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify "Other (xxxx)" and include the classification title inside the parentheses. The DOTD Job Classification(s) to be used can be found at the following link:

[http://wwwsp.dotd.la.gov/Inside LaDOTD/Divisions/Engineering/CCS/Job Qualification/Job%20Classifications%20with%20Descriptions.pdf](http://wwwsp.dotd.la.gov/Inside%20LaDOTD/Divisions/Engineering/CCS/Job%20Qualification/Job%20Classifications%20with%20Descriptions.pdf)

(Italicized examples are provided, please delete and replace):

Firm name	Sub or Prime	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
GEOACE LLC	Prime	Principal	2	2
GEOACE LLC	Prime	GIS Analyst	1	2
GEOACE LLC	Prime	Computer Analyst	1	1
Bayou Rouge Environmental & Planning, LLC	Sub	Planner	1	1
Bayou Rouge Environmental & Planning, LLC	Sub	Biologist/Wetlands	1	1
Bayou Rouge Environmental & Planning, LLC	Sub	GIS Analyst	0	1

12. Organizational Chart:



13. Proposal Narrative

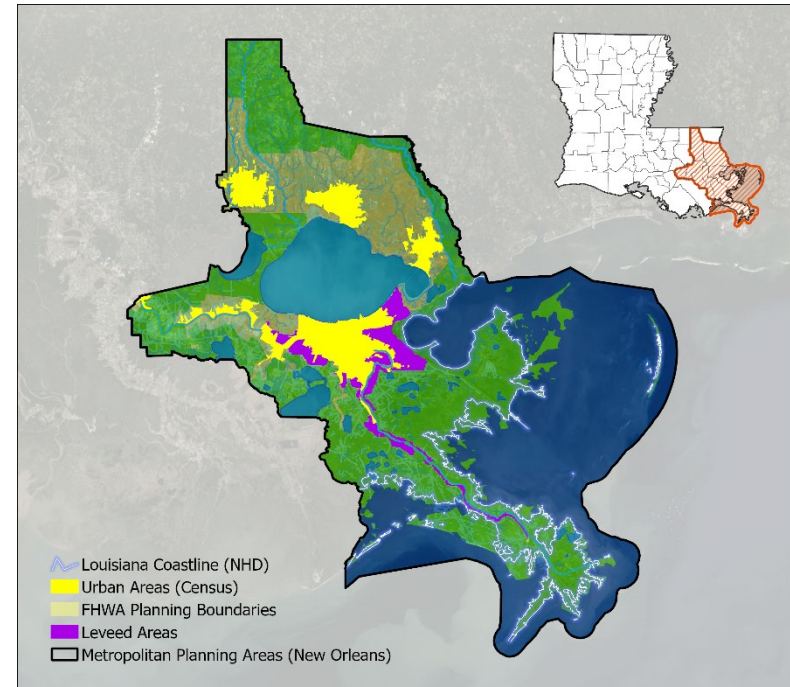
Project Understanding and Overall Approach

GEOACE's proposed methodology is designed to deliver a defensible, planning-level flood risk dataset that integrates terrain, infrastructure, land development patterns, and precipitation characteristics within a GIS-based framework. The approach emphasizes transparency and reproducibility while remaining appropriate for regional planning and policy applications. All spatial analysis, modeling, and deliverables will be developed within a GIS environment and delivered in formats fully compatible with RPC's ArcGIS Pro workflows to support seamless integration, review, and long-term maintainability.

Project Team

The project team ("the Team") consists of GEOACE LLC (GEOACE) as the prime consultant and Bayou Rouge Environmental & Planning (Bayou Rouge) as a subconsultant. GEOACE will serve as the prime consultant and technical lead, responsible for overall project delivery, development of the DEM and Roadway DEM, design and implementation of the LDII, runoff coefficient model, Pluvial Flood Risk Index, and coordination of QA/QC and documentation. GEOACE brings extensive experience in GIS-based hydrologic and environmental modeling and development of reproducible, planning-level geospatial workflows for public-sector clients.

Bayou Rouge Environmental & Planning will contribute local and regional expertise in floodplain management, watershed planning, and infrastructure conditions within NORPC's operating region in southeast Louisiana. Bayou Rouge staff will support interpretation and review of model outputs, assist in identifying localized drainage and infrastructure-related flow conditions, and participate in validation and QA/QC activities to ensure consistency with observed flood patterns and planning conditions. Team members include a Certified Floodplain Manager (CFM) with direct experience in the NORPC region.



Task 1 – Project Management

The Team will provide project management services to ensure timely delivery, quality control, and effective coordination throughout the project, in accordance with the Scope of Services and in close coordination with RPC staff.

Project management will include a kickoff meeting to confirm scope, deliverables, and communication protocols; development of a project management plan outlining task sequencing, milestones, and quality control procedures; and regular coordination with RPC through scheduled progress meetings or calls. GEOACE will submit monthly progress reports and invoices in the required format and maintain an organized project archive of datasets, documentation, and deliverables.

Local coordination and review will be supported by Team members based in southeast Louisiana. At key milestones, Bayou Rouge personnel will provide contextual review of interim datasets and draft outputs to identify potential anomalies and confirm consistency with local floodplain conditions, supporting quality assurance without expanding project scope or data collection requirements.

The project schedule is structured to support the eight-month delivery timeline while allowing for iterative review and validation across technical tasks.

Task 2 – Data and Model Architecture

The Team will establish a clear, documented data and model architecture early in the project, following project kickoff, to ensure consistency, transparency, and reproducibility across all subsequent tasks. This architecture defines how datasets are prepared, related, and combined throughout the flood risk assessment workflow and provides a clear roadmap for implementation, review, and long-term maintenance.

Key activities under this task will include confirming the spatial units of analysis (e.g., block groups, watersheds, and subwatersheds), identifying authoritative input datasets for each model component, and defining standardized attribute structures used to link terrain-derived variables, development intensity metrics, runoff coefficients, and flood risk indicators. The Team will document how outputs from the hydroconditioned DEM and Roadway DEM inform subsequent analyses, how the Landscape Development Intensity Index (LDII) is linked to runoff coefficients through attribute relationships, and how these components are combined to produce the Pluvial Flood Risk Index.

Terrain processing and spatial visualization will be performed within a GIS environment capable of efficiently processing and visualizing large, high-resolution raster datasets (e.g., ArcGIS Pro, WhiteboxTools).

Certain non-raster, attribute-driven components of the workflow (such as index calculation, normalization, weighting, and scenario evaluation) may be implemented using a PostgreSQL relational database, improving efficiency and providing a transparent, self-documenting framework for calculations that evolve over time. Results from these processes will be linked back to GIS features and delivered in formats fully compatible with RPC's ArcGIS Pro environment.

Validation and quality assurance checkpoints will be defined as part of the model architecture, and key assumptions, constraints, and data limitations will be documented early to ensure alignment with the planning-level intent of the study.

Deliverables from this task will include a concise Model Architecture summary and supporting documentation describing data flows, integration points, and model dependencies, consistent with the task interactions illustrated in Figure 1 (Task and Data Integration Diagram; next page). This foundation will support efficient execution of subsequent tasks and long-term maintainability of the resulting datasets by RPC staff.

Task 3 – Data Aggregation or Acquisition (If Applicable)

The Team will review RPC-provided datasets and relevant publicly available sources to confirm data completeness, suitability, and consistency with the model architecture established under Task 2. This review will focus on identifying any data gaps or limitations that could materially affect development of the DEM, Roadway DEM, LDII, runoff coefficient model, or Pluvial Flood Risk Index. Where gaps are identified, the Team will first evaluate whether they can be addressed through aggregation, refinement, or reinterpretation of existing datasets. If additional datasets are determined to be beneficial, the Team will document recommended options, including potential sources, limitations, and implications for scope, schedule, and cost. Any data acquisition beyond publicly available or RPC-provided sources will be coordinated with RPC in advance and undertaken only with explicit authorization.

Consistent with the planning-level intent of this study, this task does not assume field data collection or ground truthing beyond available datasets. Bayou Rouge will support this task by providing local and regional insight into dataset applicability, known limitations, and contextual relevance within NORPC's operating region. This will help to inform interpretation of existing data without introducing new data collection requirements. All datasets used in subsequent modeling will be documented with respect to source, resolution, temporal coverage, and known limitations to ensure transparency and support downstream validation and interpretation.

Deliverables for this task will include documentation of datasets reviewed, any identified gaps or limitations, and a summary of recommendations, if applicable, incorporated into the Model Architecture documentation.

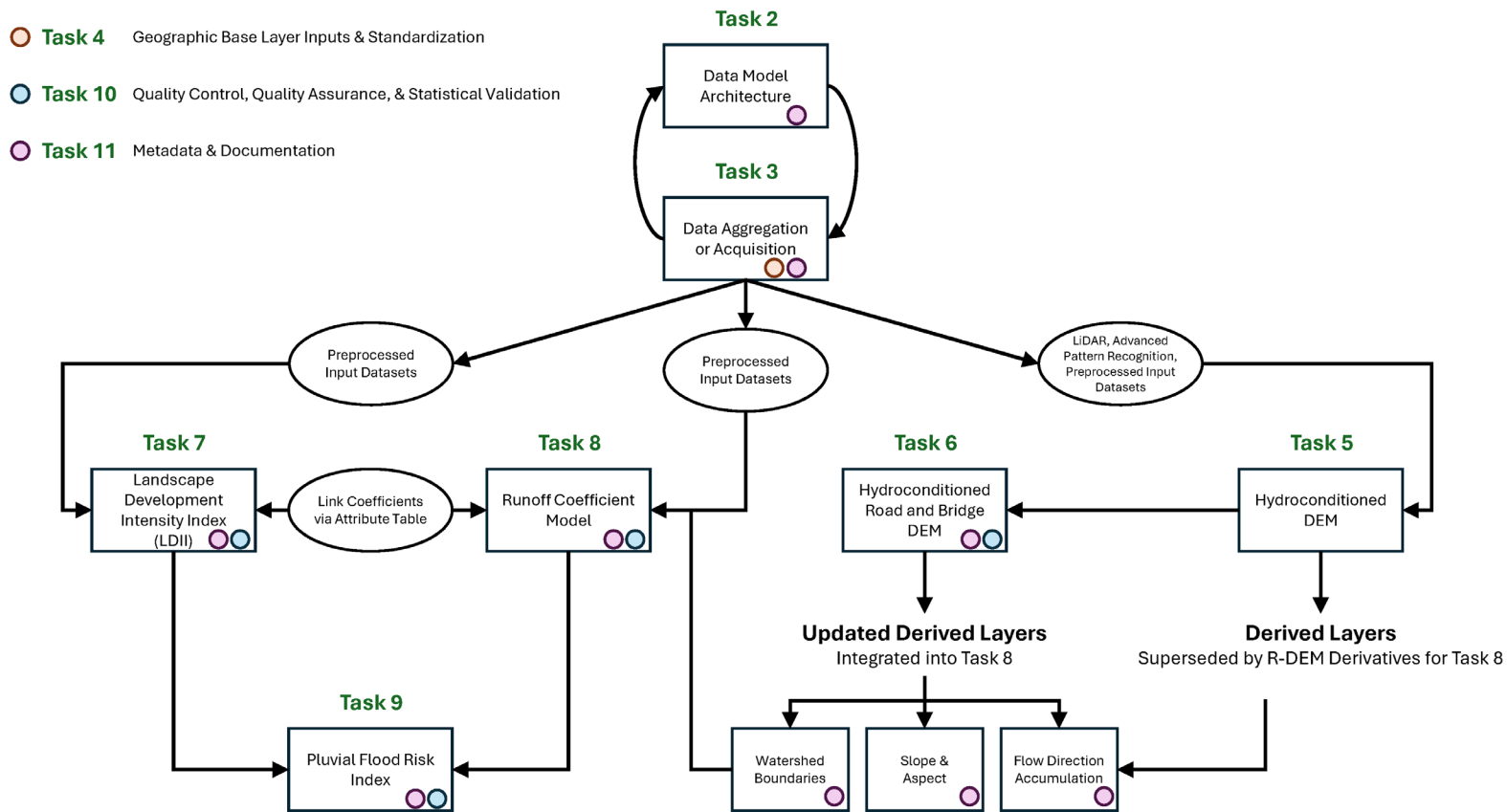


Figure 1. Task and Data Integration Diagram

Task 4 – Geographic Base Layer Inputs and Standardization

The Team will compile, review, and standardize all geographic base layers required to support terrain processing, development intensity analysis, runoff modeling, and pluvial flood risk assessment. These base layers provide the spatial framework upon which all subsequent modeling tasks are built and are critical to ensuring consistency and reliability across the project.

Base layers will include administrative boundaries, transportation networks, hydrographic features, land cover and impervious surface data, soils, vegetation, and other publicly available or RPC-provided datasets relevant to flood risk modeling. All datasets will be standardized to a common coordinate reference system (e.g., NAD83[2011] / Louisiana South) and will be reviewed for spatial accuracy, completeness, and logical consistency.

Quality control procedures under this task will focus on resolving geometry errors, verifying attribute integrity, and ensuring alignment between datasets used across multiple modeling components. Where necessary, datasets will be prepared and structured to support linkage to analysis units such as block groups, watersheds, and subwatersheds, consistent with the model architecture defined under Task 2.

Preprocessed base layers will be documented with respect to source, resolution, and known limitations and will be prepared for seamless integration into subsequent tasks, including DEM and Roadway DEM development, LDII calculation, and runoff coefficient modeling. This task ensures that all downstream analyses are grounded in a consistent, well-documented geospatial foundation.

Task 5 – Digital Elevation Model (DEM)

The Team will develop a high-resolution, hydroconditioned Digital Elevation Model (DEM) to support watershed delineation, surface flow analysis, and subsequent runoff and flood risk modeling across NORPC’s operating region. The DEM will be derived primarily from RPC-provided and publicly available USGS Quality Level 1 (QL1) LiDAR datasets and will serve as the foundational terrain surface for all downstream analyses.

Elevation data will be referenced to the NAVD88 vertical datum and processed in a manner consistent with applicable national flood risk mapping standards for planning-level applications. Processing will be performed to generate raster DEM products at a resolution and vertical accuracy consistent with the source LiDAR, while ensuring the resulting surfaces are suitable for hydrologic analysis. These steps are intended to improve hydrologic realism while maintaining the integrity of the source elevation data.

Hydrologic conditioning of the DEM will be performed using standard hydrology and terrain processing tools to ensure realistic surface flow representation. Conditioning steps will include pit filling and depression handling, generation of D8 flow direction and flow accumulation surfaces, and identification and correction of impeded flow paths where artificial barriers disrupt drainage continuity. Specific methodology will be adapted for regional-scale GIS analysis and informed by established elevation processing practices commonly referenced in FEMA and USACE flood risk/watershed guidance.

Derived hydrologic layers generated under this task will include slope and aspect, flow direction, flow accumulation, and preliminary watershed and subwatershed boundaries. These layers establish baseline drainage patterns and provide key inputs for subsequent modeling tasks. As illustrated in Figure 1, hydrologic derivatives generated from the base DEM will be superseded by updated derivatives following roadway and infrastructure integration under Task 6 for use in runoff and flood risk modeling.

All DEM processing steps, assumptions, and known limitations will be documented to support transparency, validation, and long-term maintainability by RPC staff.

Task 6 – Road and Bridge Digital Elevation Model

Building on the hydroconditioned DEM developed under Task 5, the Team will develop a hydroconditioned Roadway and Bridge Digital Elevation Model (R-DEM) that incorporates transportation infrastructure to more accurately represent how roads, bridges, and drainage crossings influence surface water flow. The R-DEM will improve hydrologic realism in infrastructure-dense and low-relief areas by addressing artificial flow barriers and restoring drainage connectivity where water is known or inferred to pass beneath roadways.

Transportation datasets provided by RPC, including the Federal Aid Network and evacuation routes, will be integrated into the base DEM to represent roadway embankments, bridge structures, and other features affecting overland flow. Particular attention will be given to maintaining realistic flow continuity at bridges, overpasses, and underpasses, while preserving roadway elevations where they function as flow controls.

To address gaps in culvert inventories, the Team will apply pattern-recognition techniques developed by GEOACE to assist in identifying probable drainage crossings observable in LiDAR and imagery. These inferred connections will be selectively incorporated into the R-DEM conditioning workflow to reduce artificial ponding and improve drainage representation, consistent with planning-level intent and available data constraints, and without assuming hydraulic capacity or surveyed structure geometry. Following roadway integration, hydroconditioning will be re-performed using terrain processing tools, including regeneration of flow direction, flow accumulation, and watershed and subwatershed boundaries.

As illustrated in Figure 1, derivatives generated from the R-DEM will supersede base DEM derivatives and serve as the authoritative terrain inputs for runoff coefficient modeling and pluvial flood risk assessment.

All processing steps, assumptions, and known limitations will be documented to support transparency, validation, and long-term maintainability by RPC staff. The resulting R-DEM and associated derivative layers will support regional flood risk screening, watershed analysis, and subsequent runoff modeling tasks.

Task 7 – Landscape Development Intensity Index

The Team will develop a Landscape Development Intensity Index (LDII) to quantify the degree of human development across NORPC's operating region and to support subsequent runoff and pluvial flood risk modeling. The LDII is intended to provide a spatially consistent indicator of development pressure that reflects how land use and infrastructure modify surface runoff behavior.

The LDII will be derived using a combination of RPC-provided datasets supplemented by widely used, publicly available sources (*e.g.*, NOAA Land Cover and Overture Foundation Buildings). Inputs will include land cover and impervious surface data, transportation infrastructure, and development-related indicators such as population and building density. Indicators will be normalized and, where appropriate, bounded to ensure balanced contribution within the composite index and to prevent any single input from dominating results. Datasets will be integrated within a GIS to quantify relative development intensity across the study area in a consistent, spatially explicit manner suitable for flood risk and infrastructure analysis.

Development intensity values will be calculated for defined analysis units (*e.g.*, block groups, subwatersheds) and classified into relative categories (*e.g.*, low, moderate, high) using data-driven thresholds appropriate for regional-scale planning analysis to support interpretation and scenario analysis. The classification approach will emphasize transparency and reproducibility, allowing LDII outputs to be readily understood and updated as underlying data change.

The LDII will be structured to integrate directly with the runoff coefficient model through attribute table linkages rather than through terrain processing. As illustrated in Figure 1, the LDII operates in parallel with DEM-based analyses and contributes to runoff modeling as a modifier of surface runoff potential rather than as a terrain-derived input.

Assumptions, data limitations, and known uncertainties associated with LDII development will be documented to support appropriate interpretation of results. The resulting LDII dataset will be scalable for use at block group, subwatershed, parish, and regional levels.

Task 8 – Runoff Coefficient Model

The Team will develop a GIS-based Runoff Coefficient Model to quantify relative surface runoff potential across NORPC's operating region. The model serves as the primary integration point between terrain-driven hydrologic context and land development intensity and provides a core input to the Pluvial Flood Risk Index.

Runoff coefficients will be calculated for defined spatial analysis units by integrating geospatial inputs from the R-DEM, land cover and impervious surface data, hydrologic soil groups, vegetation characteristics, precipitation information, and the LDII. Hydrologic derivatives from the R-DEM will serve as the primary terrain-based inputs within the GIS modeling framework.

The modeling approach will be consistent with planning-level applications of runoff coefficient methods, emphasizing relative differences in runoff potential rather than design-level flow estimation. Terrain-derived variables such as slope and drainage context will be combined with development intensity and soil characteristics to reflect the combined influence of physical conditions and human modification. The LDII will be linked to runoff coefficients through attribute relationships, allowing development intensity to act as a modifier within the model.

Runoff coefficients and associated attributes will be stored in GIS-compatible datasets to support visualization, aggregation, and scenario-based analysis under varying precipitation or land development conditions. All assumptions, input dependencies, and known limitations will be documented to support transparency, planning-level validation, and long-term maintainability as underlying datasets are updated.

Task 9 – Pluvial Flood Risk Index

The Team will develop a Pluvial Flood Risk Index (PFRI) to identify and characterize areas within NORPC's operating region that are relatively more vulnerable to rain-induced (pluvial) flooding. The resulting product will integrate runoff potential, development intensity, and terrain context to support regional planning, mitigation prioritization, and scenario evaluation.

The PFRI will be derived by combining outputs from the Runoff Coefficient Model with complementary spatial indicators, including the LDII and terrain-based modifiers derived from the R-DEM. Inputs will be normalized and combined using transparent, documented weighting and scoring methods to produce relative flood risk values that are comparable across block groups and scalable to other pre-defined analysis levels. The resulting index will be

structured to preserve spatial contrast, enabling clear identification of higher- and lower-risk areas within diverse development and drainage contexts.

The index is intended to highlight relative flood risk patterns and hotspots rather than to estimate flood depths, flood extents, or infrastructure performance. Consistent with other datasets generated throughout this project, the PFRI will be appropriate for planning-level applications, including land use planning, infrastructure investment screening, hazard mitigation planning, and evaluation of alternative development or precipitation scenarios.

Scenario-based outputs will be generated to illustrate how relative pluvial flood risk responds to variations in precipitation intensity and development conditions. Resulting datasets will include GIS layers and summary statistics tables which will allow RPC staff to explore risk patterns at multiple spatial scales and under differing assumptions.

All assumptions, weighting decisions, and limitations associated with the PFRI will be documented to support transparency, validation, and appropriate use of the results. The final Pluvial Flood Risk Index datasets will be designed for long-term usability and integration with RPC's broader flood risk and watershed planning efforts.

Task 10 – Quality Control, Quality Assurance, and Statistical Validation

The Team will implement a structured Quality Control and Quality Assurance (QC/QA) process and a statistical validation framework to ensure that all datasets and model outputs developed under this project are accurate, internally consistent, and suitable for their intended use. QC/QA and validation activities will be applied iteratively across tasks, consistent with the overall project workflow.

QC/QA procedures will be applied to all input datasets and intermediate products, including base layers, the hydroconditioned DEM and R-DEM, LDII outputs, runoff coefficients, and PFRI layers. These checks will include verification of spatial alignment and coordinate systems, review of attribute completeness and logical consistency, and identification and resolution of processing artifacts or anomalies.

Statistical validation will focus on evaluating the reasonableness and robustness of spatial patterns relative to available observational and reference datasets, including comparison with publicly available flood records and historical event information where applicable. Interpretation of validation results will be informed, where appropriate, by local contextual knowledge provided by Bayou Rouge's CFM through comparison with observed planning conditions.

Diagnostic performance metrics referenced in the scope—such as Nash–Sutcliffe Efficiency (NSE), Root Mean Square Error (RMSE), and Percent Bias (PBIAS)—may be applied in a limited, exploratory manner where suitable data exist to support interpretation of model behavior and sensitivity rather than to establish acceptance thresholds. Sensitivity analyses will assess the influence of key assumptions and weighting decisions, and findings will be documented transparently.

Deliverables will include draft and final validation documentation summarizing QC/QA procedures, validation methods, diagnostic metrics, and key conclusions to support informed interpretation and use of the datasets by RPC staff and stakeholders.

Task 11 – Metadata and Documentation

The Team will prepare clear and comprehensive metadata and documentation for all datasets and model outputs developed under this project to support transparency, reproducibility, and long-term usability by RPC staff and partners. Documentation will be tailored to planning and policy applications and structured to support future updates as underlying data sources change.

Metadata will be prepared for all spatial datasets in accordance with applicable FGDC/ISO standards and will document data sources, processing steps, coordinate reference systems, assumptions, and known limitations. Metadata will be embedded within GIS datasets and integrated with the final geodatabases.

Project documentation will describe the overall modeling framework, including how DEM and R-DEM derivatives, LDII outputs, runoff coefficients, and the PFRI are generated, related, and used together, as well as intended uses, interpretation guidance, and planning-level constraints.

A concise, user-oriented summary will be provided to support communication of results to planners, decision-makers, GIS staff, and other stakeholders, including guidance on appropriate use, limitations, and non-regulatory disclaimers consistent with RPC data development policies. All documentation will be delivered electronically and organized to support efficient reference and long-term maintenance by RPC staff.

14. Project Schedule

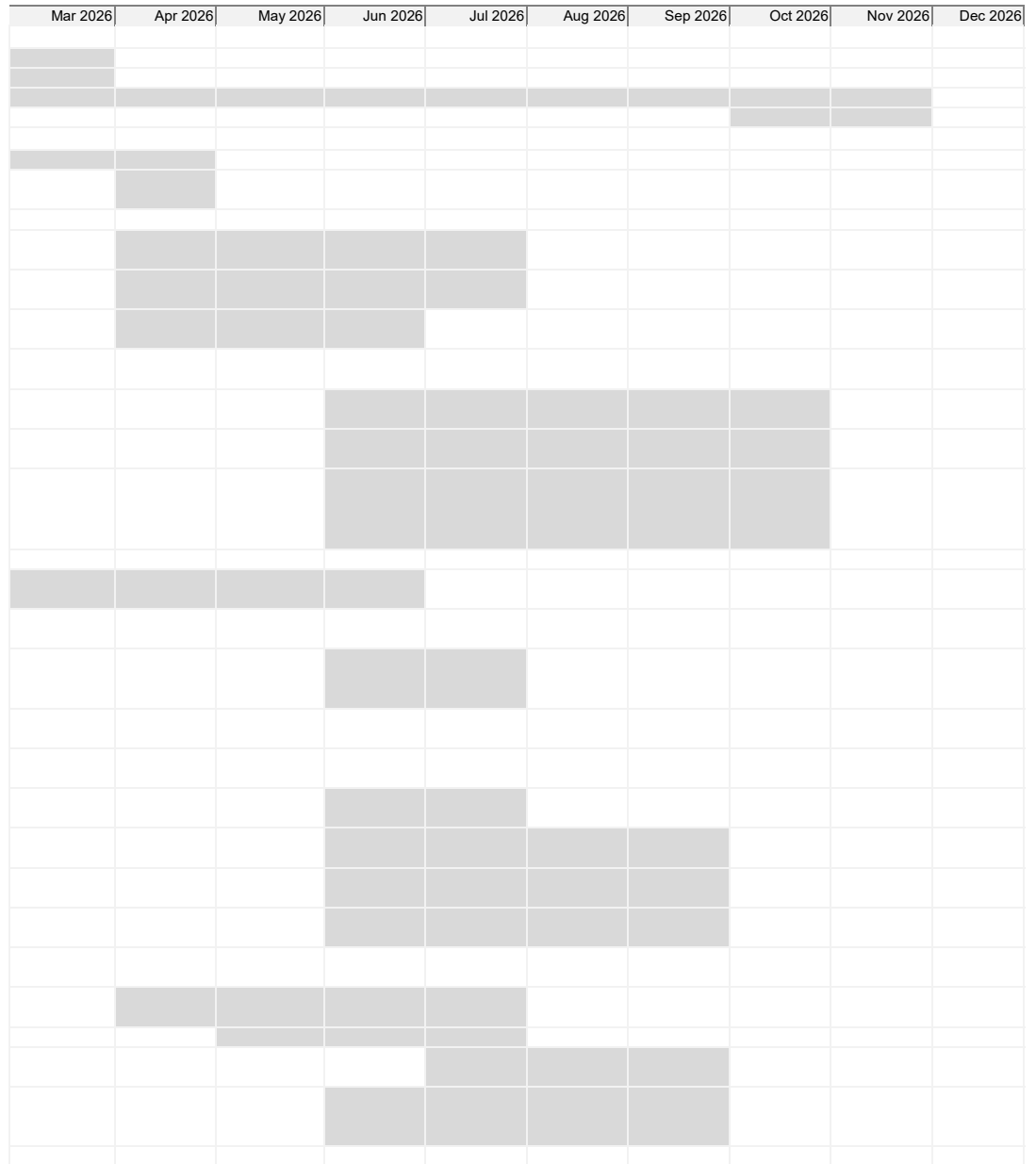
Flood Risk Assessment: Geospatial Dataset Development

Consultant Team: GEOACE and Bayou Rouge Environmental & Planning

This monthly Gantt chart is illustrative and reflects an **eight-month project duration** consistent with the RFP schedule requirements; invoicing and administrative tasks may lag behind the completion of technical work.

Project start: **Mon, 3/2/2026**

TASK	ASSIGNED TO	START	END
Task 1 - Project Management			
Project management plan	Bayou/GEOACE	3/2/2026	3/27/2026
Kickoff meeting summary	Bayou	3/2/2026	3/10/2026
Monthly progress reports and invoices	GEOACE	3/2/2026	11/30/2026
Archive of all project-related files and data	GEOACE	10/30/2026	11/30/2026
Task 2 - Data and Model Architecture			
Draft and final Model Architecture Report	GEOACE	3/10/2026	4/6/2026
Presentation summarizing the model architecture and development approach	GEOACE	4/6/2026	4/6/2026
Task 3 - Data Aggregation or Acquisition			
All datasets aggregated or purchased under this contract	GEOACE	4/6/2026	7/2/2026
Documentation of data sources and licensing terms	GEOACE	4/6/2026	7/2/2026
Exceptions noted in the Model Architecture Report, if applicable	GEOACE	4/6/2026	6/1/2026
Task 4 - Geographic Base Layer Inputs and Standardization			
Fully standardized geographic base layers in GIS-compatible formats	GEOACE	6/4/2026	10/30/2026
Metadata for each dataset, compliant with FGDC/ISO standards	Bayou/GEOACE	6/4/2026	10/30/2026
Technical documentation describing data sources, preprocessing steps, and quality control procedures	Bayou/GEOACE	6/4/2026	10/30/2026
Task 5 - Digital Elevation Model (DEM)			
Hydrologically conditioned DEM covering the full RPC region	GEOACE	3/10/2026	6/3/2026
Derived slope, aspect, flow direction, flow accumulation, and watershed boundary layers	GEOACE	3/10/2026	6/3/2026
Metadata and technical documentation detailing preprocessing steps, validation methods, and data sources	GEOACE	6/4/2026	7/6/2026
Task 6 - Road and Bridge Digital Elevation Model (R-DEM)			
Hydrologically conditioned R-DEM with embedded transportation features	GEOACE	6/1/2026	7/31/2026
Updated flow direction and accumulation rasters reflecting infrastructure impacts	GEOACE	6/1/2026	7/31/2026
Seamless raster DEM incorporating roads and bridges	GEOACE	6/1/2026	9/1/2026
Derived watershed and subwatershed boundaries adjusted for transportation effects	GEOACE	6/1/2026	9/1/2026
Metadata and technical documentation describing methodology and validation	GEOACE	6/1/2026	9/1/2026
Task 7 - Landscape Development Intensity Index (LDII)			
GIS-based LDII layer with polygon-level classifications	Bayou/GEOACE	4/1/2026	7/6/2026
LDII-Runoff Coefficient lookup table	Bayou/GEOACE	5/7/2026	7/6/2026
Summary maps and statistics showing development intensity across the region	Bayou/GEOACE	7/6/2026	9/1/2026
Metadata and technical documentation describing methodology, assumptions, and limitations	Bayou	6/1/2026	9/1/2026
Task 8 - Runoff Coefficient Models			




15. Cost and Budget

Firm	Labor	Travel	Other Direct Costs*	Proposed Profit (10%)	Firm Total
GEOACE LLC	\$272,000	\$12,000	\$7,000	\$29,100	\$320,100
Bayou Rouge Environmental & Planning	\$81,000	\$2,000	\$1,000	\$8,400	\$92,400
TOTAL	\$353,000	\$14,000	\$8,000	\$37,500	\$412,500


*Other Direct Costs are limited to project-specific data acquisition and computing resources, if required.

16. Staff Experience:


Résumés shall be provided for all personnel listed in Sections 12 of the proposal. Résumés of personnel not identified in Section 12 of the proposal should not be included and will not be evaluated. Résumés should be limited to 2 pages per person.

Firm employed by:					
Name	Aaron Laver		Years of relevant experience with this employer	5	
Title	CTO		Years of relevant experience with other employer(s)	11	
Degree(s) / Years / Specialization			B.S., Environmental Science / 2011-2014 / Water Science		
Discipline	Geospatial Modeling	Certifications	Certified Ecologist, <i>Ecological Society of America</i> Enterprise Administration Professional 19-001 #VXT76MV2KN1EQ8WF, <i>Esri</i> Remote Pilot #4056760, <i>Federal Aviation Administration</i>		
Contract role(s) / brief description of responsibilities			Technical Lead responsible for technical execution across all project tasks, including hydrologic modeling, DEM and Roadway DEM development, GIS workflows, runoff modeling, and coordination of QA/QC and documentation.		
Experience dates (mm/yy–mm/yy)	<i>Experience and qualifications relevant to this study:</i> Aaron Laver is a geospatial scientist and technical lead with extensive experience designing and implementing planning-level hydrologic and landscape analysis models, including regional-scale DEM processing, index-based scoring frameworks, and watershed decision-support tools. His work emphasizes transparent, GIS-native methodologies that integrate terrain, land use, and development indicators to support watershed screening, runoff assessment, and long-term public-sector planning.				
06/21–Ongoing	<p>Parcel-based Ecological Restoration Model (PERM), Versions 1–3 (Ohio DNR)</p> <p>Serves as the technical lead, model architect, and primary developer for the Parcel-based Ecological Restoration Model (PERM), a regional, GIS-native decision-support model designed to quantify landscape condition, development pressure, hydrologic function, and restoration potential across the Western Lake Erie Basin. PERM operates at parcel, subwatershed, and watershed scales and has been implemented across approximately 10,000 square miles, encompassing over 1 million parcels.</p> <p>Leads the design and implementation of a transparent, reproducible, index-based modeling framework integrating hydroconditioned digital elevation models with land cover, soils, hydrology, floodplain extents,</p>				


	<p>infrastructure, and development-related indicators. The model translates heterogeneous spatial inputs into standardized, planning-level indices describing relative landscape condition and runoff-related behavior, enabling comparison across jurisdictions.</p> <p>Core responsibilities include development of automated DEM hydroconditioning workflows, generation of hydrologic derivatives, and creation of scalable GIS pipelines supporting watershed delineation, floodplain interaction metrics, and parcel-level hydrologic scoring. Terrain-derived inputs were integrated with non-terrain indicators (e.g., land cover, impervious and agricultural patterns, proximity metrics, and floodplain acreage) through a structured scoring system designed to remain interpretable to planners and decision-makers.</p> <p>Aaron designed a tiered scoring architecture aggregating individual parameters into thematic categories (e.g., hydrology, land cover, soils, connectivity), with weights defined to reflect planning priorities rather than engineering precision. Oversaw expansion from an initial multi-county pilot to basin-wide implementation, emphasizing documentation, validation, automation, and long-term maintainability for public agency use in scenario analysis and watershed planning.</p>
01/20–12/23	<p>Farming for Cleaner Water – Upper Scioto River Watershed (American Farmland Trust)</p> <p>Served as a core member of the GIS and technology team supporting watershed-scale planning for American Farmland Trust’s Farming for Cleaner Water initiative in the Upper Scioto River Watershed. Contributed to the integration and analysis of land cover, soils, hydrology, and water quality datasets to support planning-level identification of priority areas for runoff and nutrient reduction, with outputs designed for scenario evaluation and stakeholder decision support.</p>
10/14–08/15	<p>City of Columbus Watershed Master Plan (CDM Smith)</p> <p>Provided GIS mapping and spatial analysis support for a large-scale watershed master plan focused on protecting drinking water source areas for the City of Columbus Division of Water. Developed regional geospatial datasets and maps integrating land use, hydrology, infrastructure, and water quality risk factors to support planning-level assessment of watershed conditions and long-term source water protection strategies across an ~1,250 sq mi drainage area.</p>

Firm employed by:					
Name	Michael Bowen		Years of relevant experience with this employer	2	
Title	CEO		Years of relevant experience with other employer(s)	25	
Degree(s) / Years / Specialization			Associate / 1997-2000 / GIS		
Discipline	Geospatial Modeling	Certifications / Awards	Esri Special Achievement in GIS Award – 2015 Esri Hero of Electric Utilities - 2020		
Contract role(s) / brief description of responsibilities			<i>Deputy Project Manager / Senior GIS Lead</i> Mike will support project leadership, provide GIS oversight, and contribute to GIS analysis and review of analytical outputs while serving as an alternate project lead to ensure continuity and effective coordination with RPC staff.		
Experience dates (mm/yy–mm/yy)	<i>Experience and qualifications relevant to this study:</i> Mike Bowen is a founding member of GEOACE with more than 22 years of experience delivering enterprise and utility GIS solutions within the Esri ecosystem. For this study, he will provide technical oversight and strategic guidance on GIS architecture, data integration, and workflow design, drawing on his experience leading large-scale Utility Network and enterprise GIS initiatives.				
04/25-11/25	Sewage Treatment System (STS; Holmes County) Mike served as Project Manager and Lead Developer for Holmes County’s STS modernization initiative, transforming a largely manual, paper-based permitting and inspection process into an integrated, countywide GIS solution. GEOACE designed and implemented the core geodatabase, feature layers, automated workflows, and web applications used to manage permitting, inspections, compliance tracking, and reporting. The system now serves as the authoritative platform supporting day-to-day operations and regulatory oversight for STS activities in Holmes County.				
01/25-05/25	Conservation Planning Tool (CPT; Holmes County)				

	<p>Mike served as Lead Developer for the Holmes County Conservation Planning Tool (CPT), a GIS-based system designed to track, manage, and analyze conservation activities across farms and privately owned lands throughout Holmes County and surrounding areas. GEOACE redesigned and modernized both office and field workflows to align with current GIS and data collection standards, improving data accuracy, consistency, and usability. Information collected through the CPT supports day-to-day conservation planning efforts and is also leveraged to document outcomes, prioritize projects, and strengthen applications for state and federal conservation grant funding.</p>
03/25-06/25	<p>Equivalent Runoff Unit (ERU) Program (City of Obetz)</p> <p>Mike served as Project Manager and Lead Developer for the City of Obetz's Equivalent Runoff Unit (ERU) program. The project involved citywide mapping and analysis of impervious surfaces, including digitization and area calculations used to establish accurate ERU values for commercial properties. GEOACE developed the geospatial data, analytical workflows, and supporting tools required to ensure stormwater utility fees are calculated consistently and equitably. The program provides the City with a defensible, data-driven billing framework that improves revenue accuracy and ensures proper fee assessment and collection.</p>
09/25-11/25	<p>Lead Service Line Inventory and Replacement Program (City of Pataskala)</p> <p>Mike served as Project Manager and Lead Developer for the City of Pataskala's Lead Service Line Inventory and Replacement Program, supporting compliance with the EPA's Lead and Copper Rule Improvements (LCRI). GEOACE implemented a GIS-based system to inventory service line materials, support field validation, and track replacement progress for compliance monitoring and reporting.</p>
11/22-01/23	<p>Ottawa County Land Use and Development Intensity Mapping (Ottawa County Park District)</p> <p>Served as project lead for countywide land use and land cover mapping for the Ottawa County Park District, documenting development patterns and land use change. Developed GIS datasets and map products quantifying development intensity to support planning, conservation, and resource management decisions.</p>
01/18-06/23	<p>American Electric Power (AEP) – Active Transmission Project (ATP) Solution</p> <p>Mike served as Solution Lead Architect for a GIS-based platform managing the full lifecycle of AEP transmission projects, integrating multiple enterprise systems into a single authoritative geospatial environment. The solution supports coordinated planning, real-time project tracking, and decision-making for field and office teams across AEP's multi-state service territory.</p>

Firm employed by:					
Name	Emi Chongsiriwatana		Years of relevant experience with this employer	1	
Title	Data Analyst		Years of relevant experience with other employer(s)	2	
Degree(s) / Years / Specialization			B.S. / Expected 2026 / Earth Sciences – Climate, Water, and the Environment		
Discipline	Geospatial Analytics	Certifications / Awards			
Contract role(s) / brief description of responsibilities			<i>Geospatial Analyst</i> Emi supports regional dataset acquisition, preprocessing, and updates to GIS and raster inputs under the direction of the Project Manager and Technical Lead.		
Experience dates (mm/yy–mm/yy)	<i>Experience and qualifications relevant to this study:</i> Emi is a geospatial analyst and Earth Sciences undergraduate who has supported PERM Version 3 since September, contributing to regional dataset acquisition, QA/QC, and updates to GIS and raster inputs used in parcel- and watershed-scale analysis. Her work includes sourcing authoritative environmental datasets, performing preprocessing and spatial validation, and integrating updated inputs into GEOACE’s modeling workflows.				
09/25-Present	PERM, Version 3 (GEOACE) Supports PERM Version 3 through regional-scale dataset acquisition, preprocessing, and QA/QC for GIS and raster inputs used in parcel- and watershed-level analysis. Responsibilities include sourcing authoritative land cover, hydrology, soils, and climate datasets; performing spatial validation and standardization; and integrating updated inputs into GEOACE’s modeling workflows to support repeatable, planning-level analysis.				
05/25-08/25	Ohio Department of Natural Resources – H2Ohio Program (Intern) Supported statewide water quality and restoration initiatives through GIS analysis and field activities, including mapping results of a statewide mussel survey in ArcGIS Pro, assisting with wetland and river restoration site visits, and supporting data management for H2Ohio Wetlands grant projects. This work				

	demonstrates experience working with large, multi-jurisdictional environmental datasets and public-sector water programs.
03/25-06/25	Sarasota County Environmental Services (Environmental Intern) Conducted water quality monitoring and analysis in support of county stormwater and environmental management programs. Responsibilities included collection of surface water and groundwater samples, in situ water quality measurements, biological monitoring, and preparation of sampling plans and standard operating procedures used by county staff to inform stormwater-related decisions.
03/24-Present	Undergraduate Thesis Research – Phillippi Creek Watershed, Florida (The Ohio State University) Conducted independent watershed-scale research examining factors controlling nutrient geochemistry, including watershed delineation, land use analysis, and precipitation analysis in ArcGIS Pro, along with statistical analysis of water quality data. This research reinforces applied experience integrating GIS, hydrology, and water quality data for environmental assessment.

Firm employed by:					
Name	Josiah Thoen		Years of relevant experience with this employer	3	
Title	Developer		Years of relevant experience with other employer(s)	3	
Degree(s) / Years / Specialization			N/A / 2004–2009 (DeVry) / Computer Information Systems		
Discipline	Geospatial Development	Certifications / Awards			
Contract role(s) / brief description of responsibilities			<i>Secondary Technical Lead / Senior Developer</i> Developer providing technical support for DEM- and raster-based workflows, scalable geospatial processing pipelines, and custom analytical tooling under the direction of the Project Manager and Technical Lead.		
Experience dates	<i>Experience and qualifications relevant to this study:</i> Josiah Thoen is a senior geospatial developer and systems architect with deep experience designing and implementing scalable raster-based GIS workflows, cloud-hosted geospatial services, and custom analytical pipelines. On this study, he will serve as Secondary Technical Lead, supporting DEM processing, raster data pipelines, and custom tooling to ensure technical depth, scalability, and redundancy under the direction of the Project Manager and Technical Lead.				
01/23–06/24	Parcel-based Ecological Restoration Model (PERM), Versions 2–3 (GEOACE) Worked as a primary developer embedded within the GEOACE PERM team, supporting expansion of the model from pilot implementation to basin-scale deployment. Led development of LiDAR acquisition workflows, automated DEM creation and hydroconditioning pipelines, and backend services supporting parcel-scale scoring and on-demand analysis. Developed custom APIs enabling dynamic scoring of user-defined parcel groupings, supporting regional planning and scenario evaluation across a ~10,000 square mile study area.				

<p>07/21–12/22</p> <p>07/21–12/22 (continued)</p>	<p>Transmission Imagery and Raster Management System – American Electric Power (AEP)</p> <p>Josiah was the primary developer for an enterprise-scale raster data management system supporting LiDAR, DEMs, orthoimagery, and oriented imagery across AEP’s transmission network. He designed and implemented cloud-hosted ingestion pipelines, raster validation and optimization workflows, mosaic datasets, and ArcGIS Imagery Services. The system centralized raster assets, standardized metadata management, and enabled efficient querying and visualization across large geographic extents—demonstrating direct experience with high-volume raster processing applicable to DEM and LDII workflows.</p>
<p>04/21–Present</p>	<p>Places Platform – Geospatial Systems Architecture (GEOACE)</p> <p>Josiah serves as lead API developer and database engineer for the Places Platform geospatial application. He designed backend services supporting large-scale spatial queries, automated geoprocessing workflows, and integration with cloud storage and relational databases, working closely with frontend developers to deliver a production web platform.</p>
<p>04/25–Present</p>	<p>Holmes County GIS Initiatives (GEOACE)</p> <p>Provides senior development support to GEOACE on county-scale GIS initiatives for Holmes County, contributing raster processing, automation, and custom tooling in support of sewage treatment system modernization and conservation planning workflows. Work supports integrated use of GIS data across multiple county departments and reinforced GEOACE’s delivery of scalable, maintainable systems for public-sector clients.</p>
<p>01/03–Present</p>	<p>Enterprise GIS, Raster, and Geospatial Systems (AEP)</p> <p>Serves in senior geospatial development and solution architecture roles at American Electric Power (AEP), supporting enterprise GIS and raster-based systems across a multi-state service territory. Designed and maintained production GIS platforms and cloud-hosted raster and DEM workflows operating under enterprise governance and reliability standards.</p>

17. Firm Experience:

Identify the team's project experience **most relevant** to the scope in the advertisement. The projects should be limited to a total of 5, If more than 5 projects are identified, all projects identified after the first 5 will not be evaluated. Include no more than one page per project. Projects identified shall only include work performed by firms on the team. The projects identified do not need to have been RPC projects. RPC staff may contact the contracting entity to discuss project performance.

Project name	Parcel-based Ecological Restoration Model Driven Acquisition and Restoration in the Western Lake Erie Basin		Firm responsibility (prime or sub?)	Sub
Project number	BSC1001 UOT1001	Owner's name	Ohio Department of Natural Resources (ODNR) (Planning partner and primary public-sector user; multi-phase program with additional stakeholders including Black Swamp Conservancy and the University of Toledo)	
Project location	Western Lake Erie Basin, Ohio	Owner's Project Manager	Kevin Nemer	
Owner's address, phone, email	77 S. High Street, Columbus Ohio, 43215 (330) 674-2083, Kevin.Nemer@dnr.ohio.gov			
Services commenced by this firm (mm/yy)	01/21	Total consultant contract cost (\$1,000's)	\$3,030	
Services completed by this firm (mm/yy)	02/26	Cost of consultant services provided by this firm (\$1,000's)	\$334	

Parcel-based Ecological Restoration Model



PERM
Version 2
November 16, 2022



Developed by
GEOACE
In Partnership With



GEOACE served as the technical lead and exclusive model developer for the Parcel-based Ecological Restoration Model (PERM), working as a subconsultant to Black Swamp Conservancy and the University of Toledo under multi-phase funding administered by ODNR (H2Ohio) and Ohio State University (HABRI). PERM is a regional, planning-level geospatial decision-support model used to identify priority parcels for ecological restoration, water quality improvement, and landscape-scale intervention across the Western Lake Erie Basin.

GEOACE designed and implemented a transparent, index-based modeling framework integrating hydroconditioned digital elevation models (DEMs) with land cover, soils, hydrology, floodplain extents, and development-related indicators. The model supports parcel-, subwatershed-, and watershed-scale prioritization across approximately 10,000 square miles and more than one million parcels.

PERM progressed from an initial proof-of-concept to a multi-phase program informing more than \$3.0 million in subsequent acquisition, restoration, and implementation funding. While most funds were dedicated to on-the-ground restoration, GEOACE's scope focused exclusively on development, refinement, and maintenance of the PERM framework used by the prime organizations to identify and prioritize implementation parcels, demonstrating direct linkage between the model and executed solutions.

Staff involved on this proposal include Aaron Laver (Technical Lead and Model Architect), Michael Bowen (Deputy Project Manager), Josiah Thoen (Secondary Technical Lead), and Emi Chongsirawatana (Geospatial Analyst).

Project name	Holmes County Integrated Water Quality and Infrastructure Planning Initiative		Firm responsibility (prime or sub?)	Prime
Project number	HC1001-HC1007	Owner's name	Holmes County, OH	
Project location	Holmes County, Ohio		Owner's Project Manager	Erik Parker
Owner's address, phone, email	75 E. Clinton St. Suite 112; Millersburg, OH 44654 , (330) 674-2083 , evparker@co.holmes.oh.us			
Services commenced by this firm (mm/yy)	12/24	Total consultant contract cost (\$1,000's)		\$115
Services completed by this firm (mm/yy)	12/25	Cost of consultant services provided by this firm (\$1,000's)		\$115

Sewage Treatment System GIS v1.0



Documentation Prepared for
Holmes County Health Department

Developed by
GEOACE

In Partnership With



Last Updated:
October 28, 2025

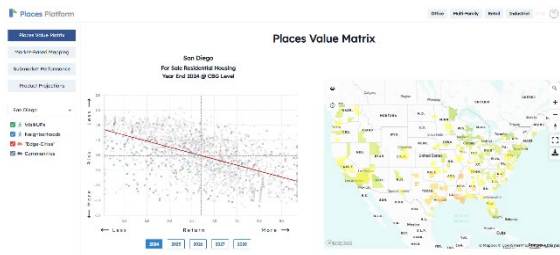
GEOACE served as the prime consultant supporting Holmes County's Integrated Water Quality and Infrastructure Planning Initiative, providing GIS leadership for modernization of sewage treatment system (STS) management and development of a countywide Conservation Planning Tool (CPT). The work supports an informal, cross-department Water Quality Team involving the Health Department, Sewer District, Soil and Water Conservation District, County Engineer, and GIS staff.

GEOACE designed and implemented centralized GIS data frameworks, enterprise geodatabases, and analytical workflows that integrate land use, hydrology, soils, infrastructure, and environmental data to support planning-level prioritization and coordination. Core deliverables included a GIS-driven STS system supporting sewer tie-in prioritization and regulatory oversight, and a Conservation Planning Tool enabling tracking, analysis, and reporting of conservation activities across agricultural and privately owned lands.

In addition to these core systems, GEOACE provided supporting automation, data extraction, and workflow enhancements including custom reporting tools, geoprocessing automation, and engineering coordination support to extend the County's ability to share data, respond to emerging needs, and support grant applications and capital planning. Together, these efforts form a unified, GIS-driven initiative supporting long-term water quality protection and infrastructure decision-making at the county level.

Staff involved on this proposal include Michael Bowen (Project Manager), Aaron Laver (Assistant PM; Developer), and Josiah Thoen (Developer).

Project name	Places Platform – National Urban Planning and Investment Analysis		Firm responsibility (prime or sub?)	Prime
Project number	PPL1001	Owner's name	Places Platform, LLC	
Project location	National (United States)		Owner's Project Manager	Nancy Allen
Owner's address, phone, email	Available upon request , nallen@placesplatform.net			
Services commenced by this firm (mm/yy)	01/21	Total consultant contract cost (\$1,000's)	\$356	
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$356	



GEOACE served as the prime technical consultant for development of the Places Platform, a national-scale, GIS-driven planning and decision-support system designed to evaluate urban development quality, infrastructure efficiency, and long-term investment potential across U.S. metropolitan areas. The platform integrates diverse spatial datasets into standardized indices that support comparison of cities and neighborhoods based on walkability, land use intensity, transportation access, and built environment characteristics.

GEOACE was responsible for end-to-end technical design and implementation, including data architecture, geospatial processing pipelines, and analytical frameworks used to translate heterogeneous urban datasets into transparent, planning-level indicators. The platform was designed to support large geographic extents, repeatable analysis, and consistent methodology across jurisdictions, enabling comparison of relative development patterns across regions.

Key responsibilities included development of scalable GIS workflows, backend services, and analytical tooling to support national coverage, as well as documentation and quality controls to ensure interpretability and long-term maintainability. While the platform supports private-sector investment analysis, its core methodology reflects urban planning principles, emphasizing development intensity, infrastructure efficiency, and spatial context—concepts directly transferable to regional land use, runoff, and flood risk screening applications.

Staff involved on this proposal include Aaron Laver (Project Lead/Solution Architect), Malcolm Meyer (Frontend Developer), and Josiah Thoen (Backend Developer).

18. Workload:

For all contracts where a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work for which the firm is currently under contract and that are staffed by key personnel proposed for this study.

List only the portion of the fees attributable to your firm.

Project name	Client/Contracting Entity	Remaining Unpaid Balance	Estimated Time to Completion
Use of high-resolution data sets to locate sites for restoration and installation of nutrient interceptors in the Maumee Watershed (UOT1001)	University of Toledo	5k	Tasks 98% complete; Contract Ends 02/01/2026
Holmes County Septic Treatment System (HCO1002)	Holmes County, OH	15k	Tasks 99% complete; Estimated completion 12/31/2025
Places Platform – National Urban Planning and Investment Analysis (PPL1001)	Places Platform, LLC	N/A, as-needed contract	Unknown (as-needed only)
City of Zanesville GIS Master Services Agreement (ZVL1005)	Zanesville, OH	20k	Unknown (as-needed only)
City of Pataskala GIS Master Services Agreement (COP1003)	Pataskala, OH	5k	12/31/2025
City of Obetz GIS Master Services Agreement (COO1001)	Obetz, OH	N/A, as-needed contract	Unknown (as-needed only)

19. Staffing Capacity:

GEOACE and Bayou Rouge are both small, specialized, disadvantaged business enterprises (DBEs) with focused portfolios and a shared approach to workload management that emphasizes capacity alignment and responsiveness. Staffing for this project has been intentionally planned to ensure adequate availability of key personnel throughout the study period, while maintaining continuity across concurrent commitments.

As summarized in the current workload table, GEOACE’s active projects are either nearing completion or structured as as-needed master services agreements that require limited, intermittent support. Two major technical efforts are more than 98% complete and scheduled to conclude by early 2026, and remaining municipal agreements do not require continuous staff allocation. This workload profile allows GEOACE to dedicate consistent project management, technical leadership, and analytical capacity to this effort without competing demands on key staff.

Bayou Rouge’s current workload similarly consists of mapping and planning engagements performed on an as-needed basis, historically requiring limited weekly staff time. Recent scope-driven projects have been completed, with no outstanding obligations expected to constrain availability during the proposed project period. This enables Bayou Rouge to provide focused planning, coordination, and review support as needed throughout the study.

Together, the GEOACE–Bayou Rouge team provides sufficient staffing depth through clearly defined roles, complementary expertise, and built-in redundancy. The combined capacity of both firms ensures that project tasks can be executed efficiently, schedule adjustments accommodated as needed, and consistent availability maintained for coordination with RPC staff over the duration of the engagement.

20. Sub-consultant information:

If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name	Address	Point of Contact and email address	Phone Number
Bayou Rouge Environmental & Planning LLC	3346 Drusilla Ln, Suite A Baton Rouge, LA 70809	Savannah R. Morales	(225) 385-3403

Sections 1-9 and 16-18 must be completed separately by each subconsultant and included below.

MODIFIED DOTD FORM: 24-102

RPC REQUEST FOR PROPOSALS (RFP)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

Please read carefully, as this form differs from Standard Form DOTD 24-102. **Subconsultants should respond only to questions 1-9 and 16-19, and these responses should be labeled by firm and included as attachments to of the Prime’s submittal.**

ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

1. Contract title as shown in the advertisement	Flood Risk Assessment: Geospatial Dataset Development
2. Contract number(s) as shown in the advertisement	n/a
3. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	GEOACE LLC
4. Prime consultant? (Y/N)	N
5. Consultant mailing address	3346 Drusilla Lane, Suite A, Baton Rouge LA, 70809
6. Consultant physical address (existing or to be established, if location is used as an evaluation criteria)	3346 Drusilla Lane, Suite A, Baton Rouge LA, 70809
7. Name, title, phone number, and email address of consultant’s contract point of contact	Savannah Morales, Owner/Environmental Scientist 225-385-3403, Savannah@BayouRougeEP.com
8. Name, title, phone number, and email address of the official with signing authority for this proposal	Same as above
9. This is to certify that all information contained herein is accurate and true, and that the team	

presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. RPC reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.


Signature (shall be the same person as #9):

Savannah R. Morales


[Savannah R. Morales \(Jan 12, 2026 12:20:58 CST\)](#)

Date: Jan 12, 2026

16. Staff Experience:

Firm employed by					
Name	Maggie Gleason		Years of relevant experience with this employer	2	
Title	Urban Planner		Years of relevant experience with other employer(s)	18	
Degree(s) / Years / Specialization			BS/2006/ Urban Planning and Studies		
Discipline	Urban Planning	Certifications	AICP – American Institute of Certified Planners CFM – Association of State Floodplain Managers		
Contract role/ brief description of responsibilities			Role: Urban Planner. Responsibilities: Maggie will ensure the technical modeling is translated into clear, actionable insights that directly support land use decisions, infrastructure prioritization, and long-term resilience planning across the region.		
Experience dates	Maggie is a certified planner and floodplain manager with broad experience in land use, transportation planning, and environmental planning of coastal areas. She has specialized expertise in community development, economic development, and watershed planning. Prior to working in the private sector as a consultant, she began her career serving the public for the City of Mandeville as the Urban Forestry Planner, implementing several nature-based projects. She moved on to manage the Long Range planning division for East Baton Rouge Parish, working on several master plans and land use studies while leading a staff of five. As a consultant, she has worked on numerous watershed plans, translating data and findings into actionable planning decisions.				
12/24-11/25	East Baton Rouge Parish Mayor’s Office of Community Development’s HUD 2025-2029 Consolidated Plan and 2025 Annual Action Plan Maggie served as the Lead Planner for coordinating the 5-Year HUD Consolidated Plan. She organized the 4 focus groups, the 2 open houses, attended all public hearings, and interfaced with HUD Federal Program managers to ensure a smooth planning process and on-time delivery of the two plans. Coordinated with the client and subconsultant to ensure an accessible project website kept stakeholders informed and empowered. Brla.gov/CommunityPlan				
07/22-12/23	HUC 12 EPA Framework Watershed Management Plan, Hancock County, MS Senior Planner on an interdisciplinary team (prime consultant was Digital Engineering) in the creation of a watershed management plan for a Mississippi coastal county. Role included data analysis of water quality and				

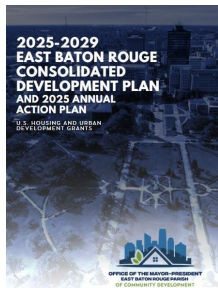
	pollutants, non-structural management measures, identification of funding sources, creation of stakeholder engagement tools, and outreach and education components.
10/23-12/23	NRCS Watershed Plan Environmental Assessment, Rawls Springs, MS Served as the Senior Planner on a Federal USDA/NRCS project in a rural, low-income area of Mississippi with major flooding issues. Role included the creation of a Public Participation Plan to ensure a broad range of community engagement through multi-modes of communication including in-person, web based, and written.
05/22- 11/22	Western Perdido Bay Watershed Management Plan Provided expertise as the certified floodplain expert and Senior Planner as a subconsultant to Geosyntec’s watershed planning project. The client was Baldwin county in Alabama with frequent flooding and water quality issues around Perdido Bay. Maggie provided a code/ordinance analysis to address both the improvements to the CRS rating and water quality issues. Identified non-structural and policy management measures for using building regulations to limit floodplain development. https://www.mobilebaynep.com/watersheds/western-perdido-bay
12/22-11/23	Ocean Springs Front Beach Marina Maggie’s role as the Senior Planner involved collaboration with scientists, landscape architects, civil engineers, and stakeholders to plan for redeveloping a former seafood processing site into a waterfront park with a marina. Implemented FEMA’s 8 Step Floodplain and Wetland decision making process for the federal permitting environmental review.
08/22-12/23	Hancock County Port and Harbor Special Management Area Tasks as the Senior Planner involved heavy collaboration with environmental scientists, planners, and engineers to facilitate coastal zone regulations with economic development through environmental due diligence and wetland mitigation. This project also involved coordination with multiple levels of government including US Army Corps of Engineers, Mississippi Department of Marine Resources, and the local governing authorities.
06/23-9/23	Lea Farms Wetland Mitigation Bank Served as the Senior Planner tasked with coordinating the Baton Rouge Drainage District with expansion of a wetland mitigation bank in the Sandy Creek watershed. Collaborated with the Parish’s floodplain administrator and the environmental scientist to establish stream setbacks to meet the new requirements of the East Baton Rouge Stormwater Master Plan.

Firm employed by				
				
Name	Savannah R. Morales		Years of relevant experience with this employer	2
Title	Environmental Scientist		Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization			BS/2017/Renewable Natural Resources Management & Ecology- Wetland Science MS/2019/ Renewable Natural Resources- Watershed Management	
Discipline	Environmental Science	Certifications	PWS- Society of Wetland Scientist, Professional Wetland Scientist	
Contract role/ brief description of responsibilities			Role: Environmental Scientist Responsibilities: Savannah will serve the team as a local ground truthing technician responsible for validating model inputs and outputs, identifying data gaps, technical writing, report designing, and project management.	
Experience dates	Savannah is a Professional Wetland Scientist with over eight years of experience focusing on environmental science, GIS/spatial analysis, data analysis, technical writing, and graphic arts. She brings these skills and local knowledge to the Flood Risk Assessment project. Her degree concentrations were in Wetland Science and Watershed Management with her published research focused on soil hydrology of Louisiana floodplain forest soils.			
05/22-09/23	Watershed Management Plans- Rotten Bayou, Cutoff Bayou, and Cambell Bayou Sub-watersheds This project involved the development of three HUC12 level Watershed Management Plans for Hancock County, Mississippi. The three Watershed Management Plans were written for the Rotten Bayou, Campbell Bayou, and Cutoff Bayou sub-watershed basins. Savannah served as an environmental scientist, GIS technician, data analyst, and technical writer.			
8/25- Ongoing	City of Grambling Master Plan Update– GIS Specialist: Savannah served as the GIS Specialist for the City of Grambling 2025 Master Plan update. She analyzed existing zoning and existing land use, created an existing land use map, natural resource maps including watersheds, hydrologic features, wetlands, population, soils, and National Land Cover Dataset maps.			

06/23	Texas Flat Subdivision Stormwater Improvements– Environmental Scientist: This project was a stormwater improvement project in a subdivision in coastal Mississippi for a stormwater improvement project in Hancock County, Mississippi. Savannah served as the permitting specialist, GIS specialist, and lead environmental scientist for this project. This project involved multiple wetland delineations and threatened and endangered species surveys and the associated permitting at the federal and state level.
02/23-03/23	Special Management Area Plan Proposal– Environmental Scientist: Savannah served as the project manager, environmental scientist, and technical writer for the proposal and application preparation to a small area plan creation and providing technical assistance. The proposal was presented to the Mississippi Advisory Committee on Marine Resources and was well received. The project was done for the Hancock County Port and Harbor Commission.
02/23-06/23	U.S. Army Corps of Engineers Section 214 Agreement Request– Environmental Scientist: Savannah served as an environmental scientist and technical writer for the development of a Section 214 Agreement request to the U.S. Army Corps of Engineers on behalf of the Hancock County Port and Harbor Commission.
06/22-07/22	Jackson County Stormwater Management– Environmental Scientist: Savannah served as an Environmental scientist working to develop stormwater management plans for watersheds within Jackson County. This project included data mining, GIS analysis, data management, and technical writing.
07/20	City of Gretna HUD Environmental Assessment– GIS Specialist: Savannah served as the GIS specialist for a HUD required Environmental Records Review done for the City of Gretna, LA.
05/17-05/19	Flood-Induced Recharge of Matrix Water in a Vertic Forest Soil: Savannah focused her thesis research on floodplain hydrology of forested soils in Southeastern Louisiana shrink-swell clay soils. The project consisted of two years of research, experiments, data analysis, technical writing, and two publications. The shrinking and swelling nature of vertisols common to Louisiana give them unique hydrological features that are not common with other soils types. Forested vertisols are unique as well due to the macropore system created by roots and other organisms such as crayfish. The peer reviewed research was published as a thesis and later in a well-established journal: AGU Water Resources Research. https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2021WR029675

17. Firm Experience:

Project name	2025-2029 East Baton Rouge HUD Consolidated Plan		Firm responsibility (prime or sub?)	Prime
Project number	n/a	Owner's name	Mayor's Office of Community Development	
Project location	East Baton Rouge Parish, LA		Owner's Project Manager	Kelly LeDuff
Owner's address, phone, email	222 St. Louis Street, Baton Rouge, LA 70802; 225-389-3039, kleduff@brla.gov			
Services commenced by this firm	06/25	Total consultant contract cost (\$1,000's)		\$150
Services completed by this firm	12/25	Cost of consultant services provided by this firm (\$1,000's)		\$84

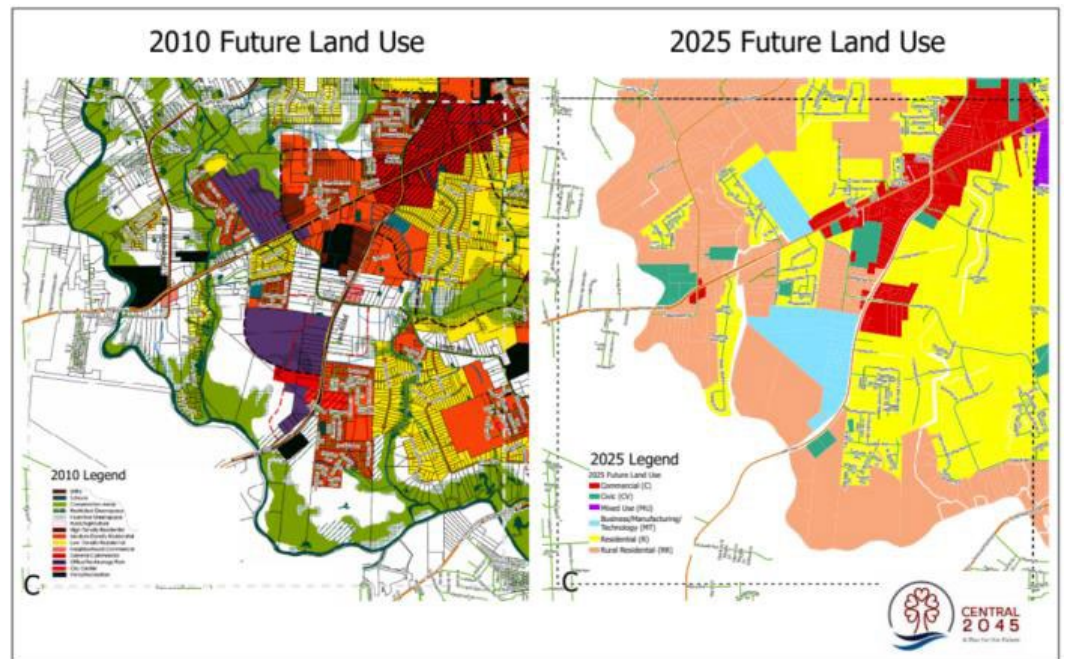


This project was to develop the 5-year consolidated plan, a required U.S. Department of Housing and Urban Development (HUD) document for local jurisdictions who receive HUD formula grants. The 5-year plan consisted of a housing needs assessment, a market analysis, a strategic plan, and an annual action plan. **The project included spatial data analysis and GIS to assess local assets, crime hot spots, blight hot spots, analysis to identify statistically significant blight and crime hot spots to identify target project areas and maximize project effectiveness, temperature heat maps, and broadband access.** All of this spatial analysis was done in relation to low to moderate household prevalence on the census block group level. The data was then used to inform grant spending and project identification. Bayou Rouge served as the prime consultant, using one sub-consultant for added capacity. The plan has been approved by HUD and adopted by the Parish in September 2025. **Savannah Morales served as the GIS and data analyst**, pulling from numerous sources to ensure the plan could assist the client in making evidence-based decisions. She incorporated data such as census, crime and blight hotspots, FEMA floodplains, heat vulnerability, and HUD housing data to create priority areas for funding. For transportation data, Savannah identified locations in low-income census tracts where crosswalks were needed, and which could be funded by CDBG dollars.

Maggie Gleason served as the lead planner, coordinating all focus groups, community meetings and ensuring best management practices for affordable housing planning, community development, and federal grant management. In total, 22 agencies and non-profits were consulted, 450 survey responses were received, and numerous plans were integrated into the final document. The result of this 9-month planning effort was \$7.7 million in HUD funding, awarded to the Office of Community Development to be used for improving the lives of low-to-moderate income residents of Baton Rouge.

Project name	City of Central, LA 2025 Master Plan Update		Firm responsibility (prime or sub?)	Sub
Project number	n/a	Owner's name	Villavaso & Associates LLC	
Project location	Central, LA		Owner's Project Manager	Steve Villavaso, FAICP
Owner's address, phone, email	6304 Beauregard Ave. New Orleans, LA 70124, 504-343-9096, svillavaso1@cox.net			
Services commenced by this firm	06/25	Total consultant contract cost (\$1,000's)	unknown	
Services completed by this firm	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$3	

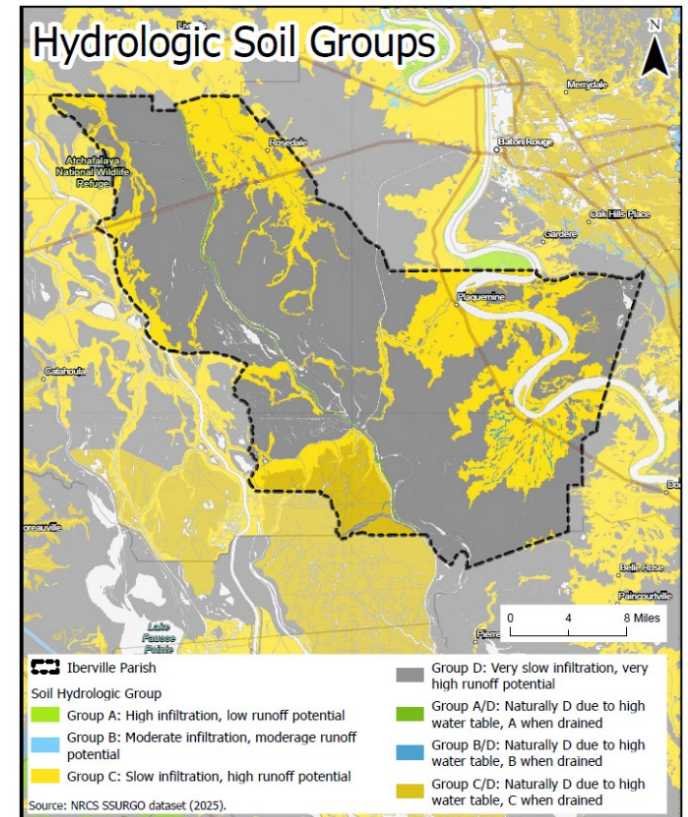
Bayou Rouge was a subconsultant to the Central Master Plan team for the 2025 re-write of the Comprehensive plan. **Our firm served as the GIS and mapping expertise to create future land use designations for the city with an eye towards resilience and equitable housing.** The Future Land Use map followed guidance from planners and local officials. The map has been well received by the client. Additional posters were created for community engagement events to showcase the changes in Future Land Use designations from the previous 2010 designations to the proposed 2025 Future Land Use designations. Other maps provided for the project included demographic maps such as population and income, and natural resource maps such as aeriels, soils, wetlands, National Land Cover Database, Major Land Resource Areas, National Hydrography Dataset, and watersheds.



Project name	2025 Iberville Parish Master Plan			Firm responsibility (prime or sub?)	Sub
Project number	n/a	Owner's name	Franklin & Associates		
Project location	Plaquemine, LA		Owner's Project Manager	Perry Franklin, MBA	
Owner's address, phone, email	250 S. Foster Drive, Baton Rouge, LA 70806				
Services commenced by this firm	10/25	Total consultant contract cost (\$1,000's)		\$400	
Services completed by this firm	Ongoing	Cost of consultant services provided by this firm (\$1,000's)		\$2	

Iberville Parish is currently in the process of updating their 20-year-old master plan. The current project, One Iberville, commenced this summer and is expected to last approximately 18 to 24 months. Bayou Rouge is serving as the **GIS experts** for the project.

Savannah is responsible for a map atlas which includes maps of soil type, soil hydrology, Land Use Land Cover data, population, wetlands and hydrologic features, aerials, streets and notable features, future land use, and zoning. As a former resident of Iberville, Savannah has also been asked to attend and act as a project representative at community engagement meetings.



Project name	Wetlands and Other Waters of the U.S. Delineation		Firm responsibility (prime or sub?)	Sub
Project number	n/a	Owner's name	CK Associates	
Project location	Calcasieu Parish, LA		Owner's Project Manager	Andrew Knight
Owner's address, phone, email	8591 United Plaza Blvd STE 300, Baton Rouge, LA 70809, 225-755-1000, andrew.knight@c-ka.com			
Services commenced by this firm	08/24	Total consultant contract cost (\$1,000's)		\$250
Services completed by this firm	11/24	Cost of consultant services provided by this firm (\$1,000's)		\$50

This project was a Wetlands and Other Waters of the U.S. Delineation for a large, proposed development in southwest Louisiana. The project consisted of delineating approximately 7,000 acres of undeveloped land in Calcasieu Parish for wetlands and potential other waters of the U.S. Due to the survey area's large size, Bayou Rouge Environmental and Planning was hired by a private environmental consultant as a field lead and Professional Wetland Scientist. Savannah served as the field lead and project manager responsible for this project. Her responsibilities included **data collection using ESRI GIS based software such as FieldMaps** and specific wetland data collection software Ecobot. Client **reports and detailed KMZs** were made to keep the client update on project status and potential upcoming logistical issues. As this project is for a private client, specific details such as owner and manager names, specific locations, and development plans are confidential.

18. Workload:

For all contracts where a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work for which the firm is currently under contract and that are staffed by key personnel proposed for this study.

List only the portion of the fees attributable to your firm.

Project name	Client/Contracting Entity	Remaining Unpaid Balance	Estimated Time to Completion
2025-2029 East Baton Rouge HUD Consolidated Plan	Kelly LeDuff, kleduff@brla.gov	\$100	Tasks Completed, contract ends 12/31/25
City of Gretna Master Plan Update	Steve Villavaso, SVillavaso1@cox.net	N/A, as-needed contract	Unknown
City of Franklinton Consent Decree Master Plan Update	Steve Villavaso, SVillavaso1@cox.net	N/A, as-needed contract	Unknown
Iberville Parish Master Plan Update	Steve Villavaso, SVillavaso1@cox.net	N/A, as-needed contract	Unknown
Grambling Master Plan Update	Steve Villavaso, SVillavaso1@cox.net	N/A, as-needed contract	Unknown

Evaluation of Statements of Qualifications Criteria/Rating Breakdown

Criteria	Scoring Range	Weight	Weighted Points Possible
1. Experience			
(a) Firm's demonstrated experience in performing like or comparable work.	0-4	3	12
(b) Demonstrated experience of key staff in performing like or comparable work.	0-4	3	12
2. Past Performance Proven ability to perform quality work as a contractor for RPC or another client, on time and on budget, on previous comparable projects. RPC may contact former clients to discuss performance.	0-4	5	20
3. Current Work Load Assessment of the ability of firm to undertake and successfully complete the RPC work required in a timely and professional manner in addition to the other work in process of the firm.	0-4	3	12
4. Firm Size Relative to Magnitude of Work Assessment of the firm's capability to successfully complete, in a timely and professional manner, all work required in view of the level of staffing and assets of the firm relative to the level of staffing and assets required to do all work required.	0-4	3	12
5. Responsiveness to Work Scope Assessment of the consultant's proposal to complete the tasks described in the work scope, demonstrating an ability to achieve the objectives of the scope within a realistic work schedule.	0-8	4	32
6. Appropriateness of Proposed Budget Reasonableness of the proposed budget given RPC's own cost analysis, and determination as to whether the proposed budget realistic given the proposed work scope.	0-5	2	10
Total Possible Points			110