MODIFIED DOTD FORM: 24-102
RPC REQUEST FOR PROPOSALS (RFP)

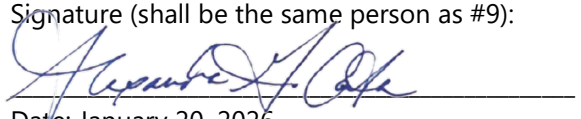
PROPOSAL TO PROVIDE CONSULTANT SERVICES

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)*	Desire Line LLC
4. *Prime consultant? (Y/N)*	Y
5. *Consultant mailing address*	1348 Chickasaw Avenue, Metairie, La 70005
6. *Consultant physical address (existing or to be established, if location is used as an evaluation criteria)*	1205 St. Charles Ave, Suite D New Orleans, LA 70130
7. *Name, title, phone number, and email address of consultant's contract point of contact*	Alexandra Gelpi Carter, AICP President & CEO, Principal Planner 504-388-0482 AlexGelpiCarter@desire-line.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.*	

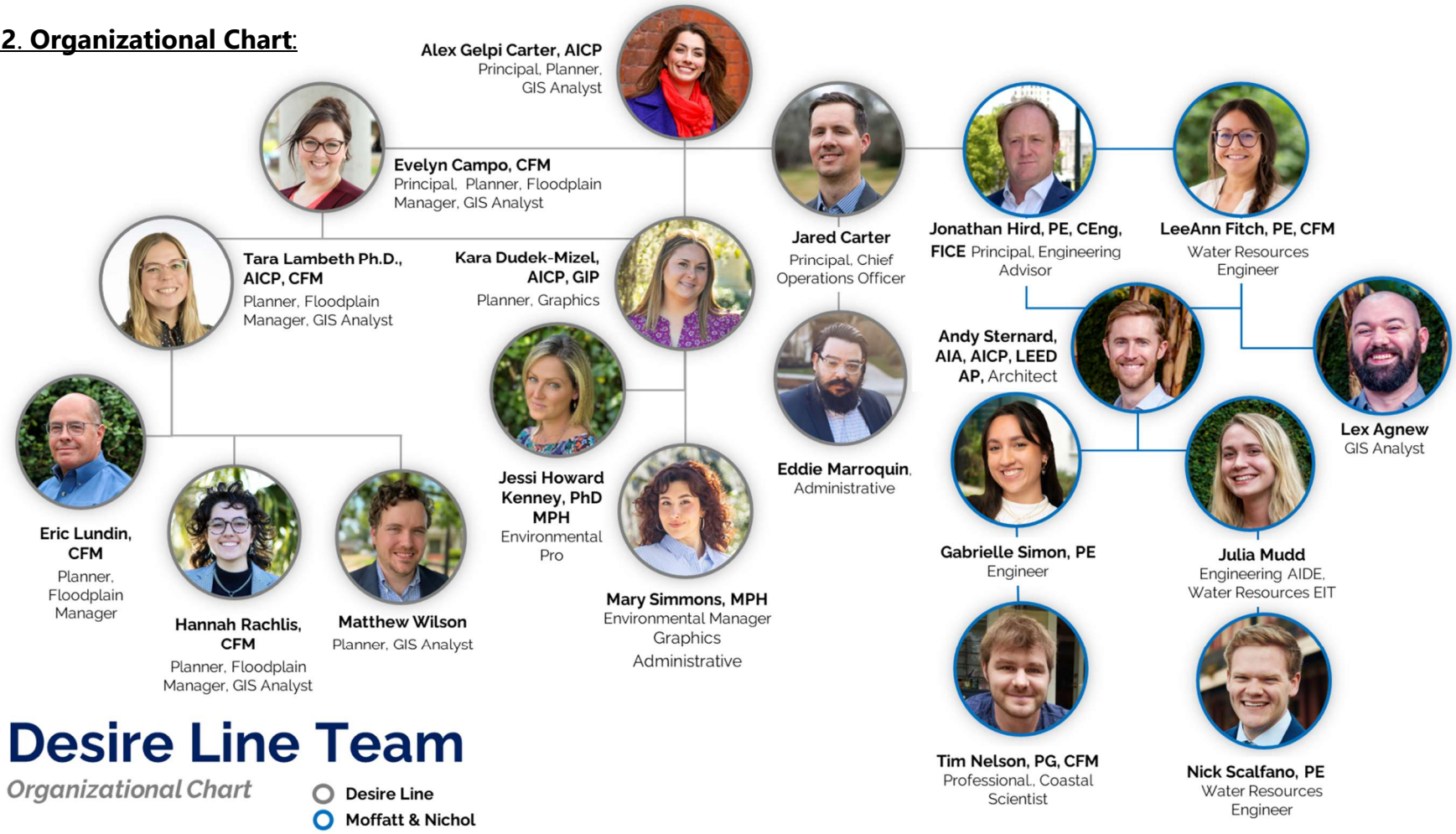
	Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor 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):  Date: January 20, 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): Desire Line LLC Firm(s) %: 50

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

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
Desire Line LLC	Prime	Principal	1	1
		Planner	2	7
		GIS Analyst	2	3
		Administrative	2	2
		Other (Floodplain Manager)	2	4
		Environmental Pro	1	1
		Graphics	1	3
Moffatt and Nichol	Sub	Principal	1	1
		Engineer	4	5
		Engineering – Aide	1	1
		Professional (Coastal Scientist)	1	1
		GIS Analyst	1	1
		Architect	1	3
		TOTALS	**20**	**33**

12. Organizational Chart:



Desire Line, Moffatt & Nichol, and Waggonner & Ball, a Moffatt & Nichol Studio, have a successful history of working as a team to prioritize and model projects for the Louisiana Watershed Initiative, including for the Region 6 Watershed Plan. For Region 6, Desire Line led planning, land use analysis, data gathering, and outreach and engagement efforts, with support from Moffatt & Nichol on project prioritization and modeling. Similarly for this RPC project, Desire Line proposes to lead planning and land use analysis, as well as plan review, data collection, and communication. Moffatt & Nichol will assist with engineering analysis and modeling. Together, the project team will produce future planning tools and project deliverables to support the Flood Risk Assessment.

13. Proposal Narrative *(10 pages)*

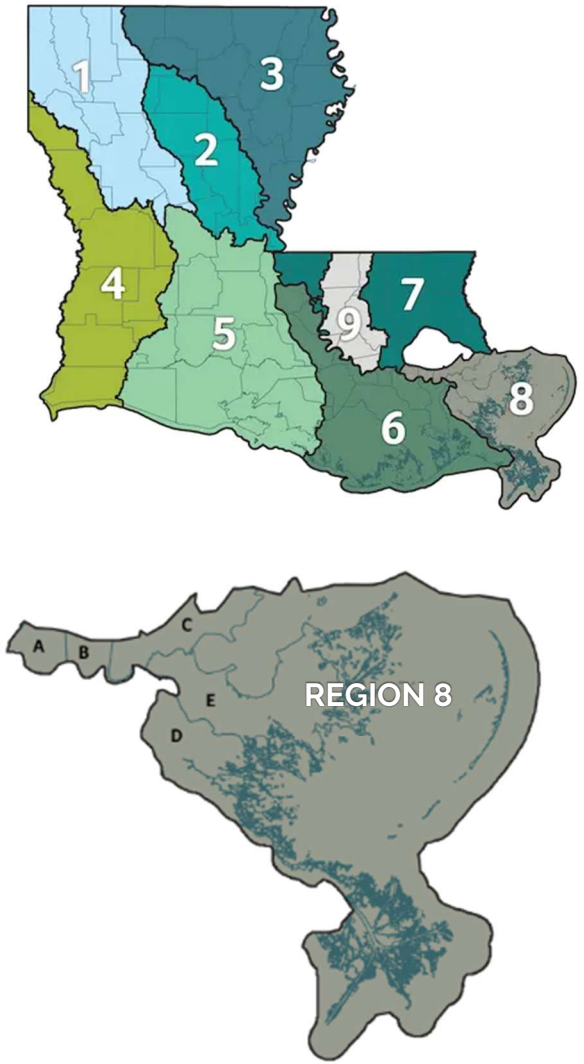
Proposal Description and Background

As the most flood-prone state in the United States, Louisiana faces urgent challenges in mitigating flood impacts. The Louisiana Watershed Initiative (LWI) represents a groundbreaking effort to address flood risk on a watershed scale. Designed as a strategic program, LWI aims to enhance floodplain management across the state, safeguarding communities, infrastructure, and natural resources by maximizing the inherent functions of our watersheds. Rather than isolating flood risk management, each watershed is viewed as an interconnected system. LWI's geographical structure focuses on 9 regional watersheds.

Region 8, composed of Jefferson, Orleans, Plaquemines, St. Bernard, and St. Charles parishes, is one of the 9 watershed regions in the state. The combination of urban, rural, and coastal environments within the region gives it a distinct environmental landscape with equally unique challenges related to flood risk. One of the challenges emerges from increased rainfall in the region, exacerbated by the combination of low-lying land and developed, urban form made up of impermeable surface materials. These surfaces increase runoff, resulting in pluvial flooding, or flooding caused by rainfall.

While other types of flooding impact the region, understanding the impacts of pluvial flooding can help parishes in Region 8 adapt and plan for anticipated levels of increased rainfall. Modeling pluvial flooding can assist the parishes with project design, policy implementation, and future land use planning. This can then create a planning level tool that includes a flood risk profile made up of land forms, elevation, impermeable surfaces, and urban density coupled with rainfall risk in furtherance of more sustainable and adaptable planning, floodplain management, and stormwater management approaches in the future.

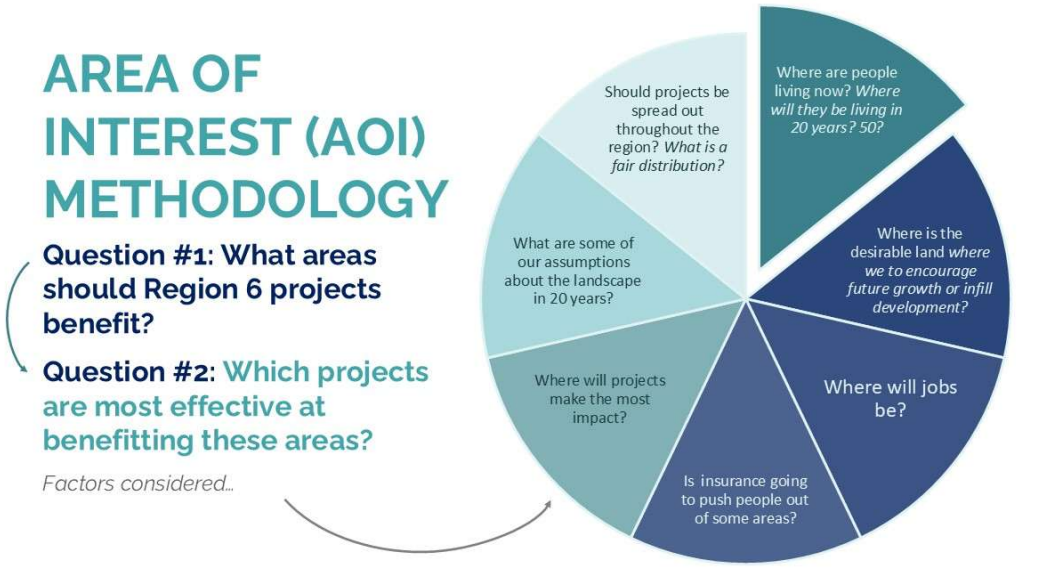
Image *(below):* Map of all 9 LWI watershed regions (top), including inset map of Region 8 (bottom) including St. Charles (A), Jefferson (B), Orleans (C), Plaquemines (D), and St. Bernard (E).



Why choose the Desire Line Team?

Place-based Leaders in Watershed Management

Desire Line staff are experts in the field of land use planning, floodplain management, and stormwater management. The Team's experience completing Region 6's Watershed Plan[1] speaks directly to these efforts. Together with Moffatt & Nichol (M&N), Desire Line has worked extensively with the LWI models and created future land use planning tools to enhance the effectiveness and usefulness of Region 6's Watershed Plan.



Specifically, in conjunction with the LWI models, Desire Line created an Area of Interest (AOI) Methodology to support project prioritization and selection.

This methodology integrates geographic characteristics, flood risk and insurance data, economic indicators, development patterns, population density, population growth rate, and future plans and projects to identify where project and planning investments (both time and funding) will have the greatest impact.

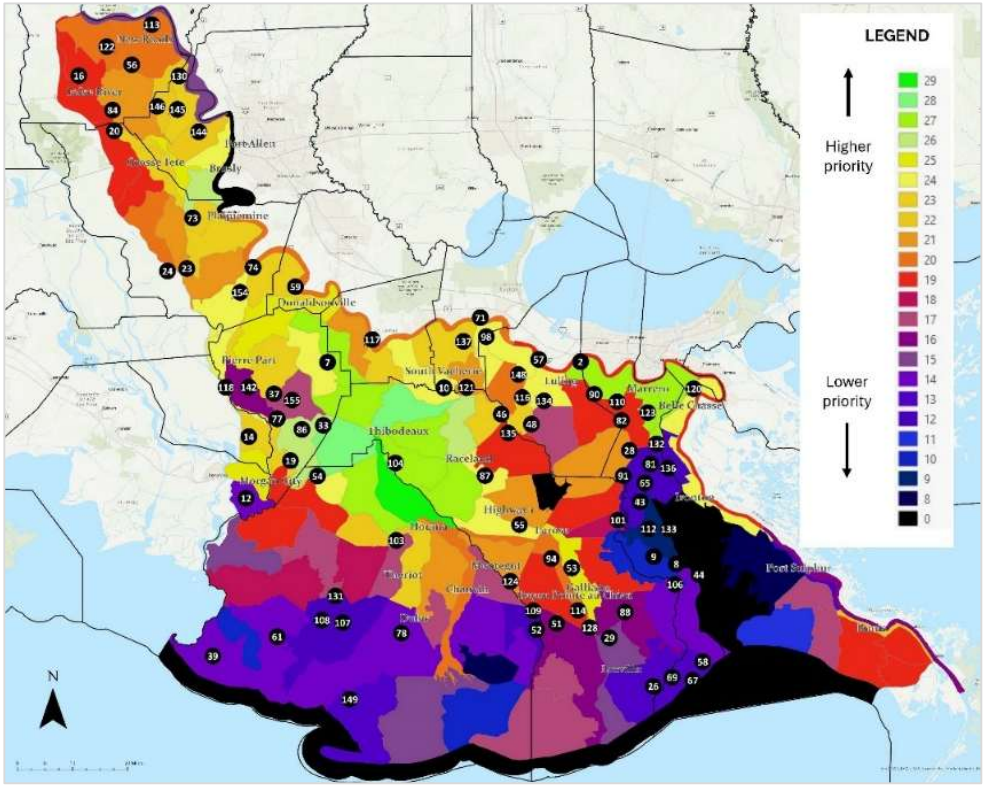
The methodology answers two central questions: Which **areas** should Region 6 projects and planning efforts be designed to benefit, and which **projects** *(including planning and floodplain management policies)* are most effective at benefiting these areas? The AOI scoring is incorporated into a mapping tool that sorts areas in Region 6 from higher to lower priority, enabling communities in Region 6 to target efforts and funding to have the most significant impact by making informed decisions and strategically prioritizing future hazard mitigation projects. As plan updates occur, it is important to acknowledge how actions across the Region will continue to shift region-wide priorities, so even if a community is not ranked high in the current plan, priorities are expected to shift depending on the goals and objectives in a future plan update. As the plan is updated, actions across the Region will continue to shape region-wide priorities. Accordingly, communities that are not highly ranked in the current plan may become higher priorities as goals and objectives shift in future updates.

[1] Note: Region 6's Watershed Plan is 90% complete; anticipated adoption in early 2026.

In addition to the modeling methodology, Desire Line has completed or reviewed stormwater plan development and floodplain management ordinances for many of the Region 8 communities (including Jefferson, St. James, and St. John), as part Region 6's existing background and data assessment because many Region 8 Westbank parish boundaries are in Region 6. As several Region 8 Westbank parish boundaries fall within Region 6, Desire Line has completed or reviewed stormwater plans and floodplain management ordinances for multiple Region 8 communities—including Jefferson, St. James, and St. John—through Region 6's background and data assessment.

To this effect, the Desire Line Team has completed comprehensive reviews of local stormwater and drainage plans, capital improvement plans, land use regulations, and floodplain management ordinances for those parishes that are split by the Mississippi and whose west bank falls within Region 6. This included analyzing existing drainage system capacity, documented problem areas, maintenance practices, planned investments, and alignment with flood risk reduction best practices.

Image *(below):* Area of Interest (AOI) Methodology mapped across Region 6, labeled from higher priority to lower priority.



The depth of this analysis, combined with stakeholder engagement ranging from public works officials, engineers, insurance agents, elected officials, and residents across the Region provides a robust understanding of conditions across parishes whose boundaries are both in Regions 6 and 8. These evaluations will serve as a technical foundation that can be directly applied to Region 8's dataset development.

Resilience Planning Experts

Desire Line is fully prepared to develop a Pluvial Flood Risk Index planning and modeling tool, supported by extensive experience creating, analyzing, and publishing geospatial datasets that integrate land use scenarios with flood risk conditions.

A recent example is the Coastal Resilience Study in St. Tammany Parish, Louisiana. The Study was initiated in response to multiple moratoriums on future development along Lake Pontchartrain in Council Districts 7 and 11. It addressed the Area's need for innovative and practical strategies to guide sustainable and resilient development patterns in locations experiencing varying types and levels of riverine and coastal flooding, higher groundwater levels, aging drainage systems, and heightened development pressure.

Working with Parish leadership, staff, and residents, Desire Line paired topographic data with zoning, land use, repetitive loss, and wetlands analysis, along with community feedback, to assess existing conditions and identify the drivers of flood vulnerability. This mapping and scenario evaluation methodology identified, at a parcel level, where future development could occur more safely, where higher standards could mitigate future flood risk, and where conservation and infrastructure improvements could have a more significant impact at reducing future flood risk. The Study included a comprehensive set of regulations and two Resilience Overlays that were adopted in 2025. Due to the scalable nature of this methodology, plans to extend the Overlays to address the variable flood risk factors across the Parish are underway.

Since the Parish's adoption, the Town of Abita Springs has applied a variation of this methodology with assistance from Desire Line as part of their townwide rezoning process. They are expected to adopt a new Land Development Code and updated zoning map (including an adaptive mixed use base zoning district and a Resilience Overlay Zone in early 2026.

The scalable nature of this Study methodology provides a precedent for developing a Pluvial Flood Risk Index that supports planning and investment decisions across the diverse conditions found in Region 8.

Image *(below):* Existing topographic conditions and proposed zoning map for St. Tammany Parish Districts 7 and 11.

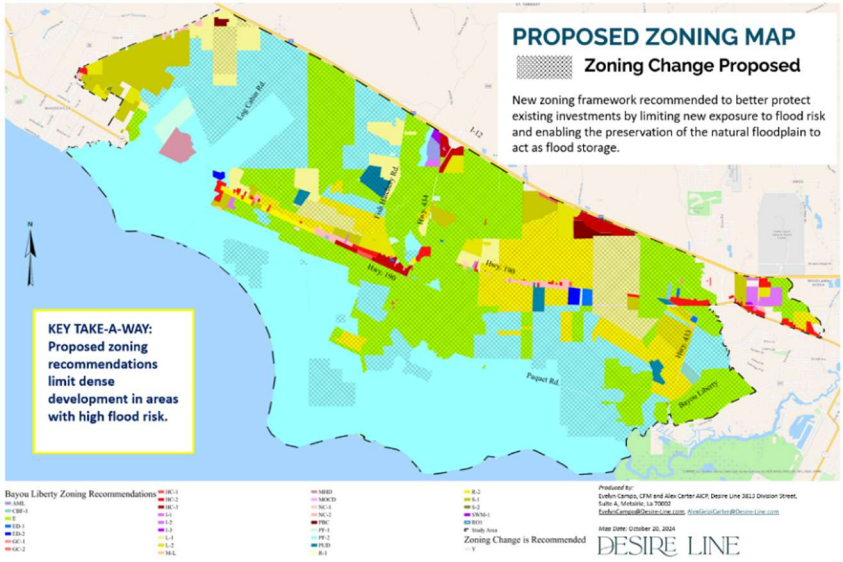
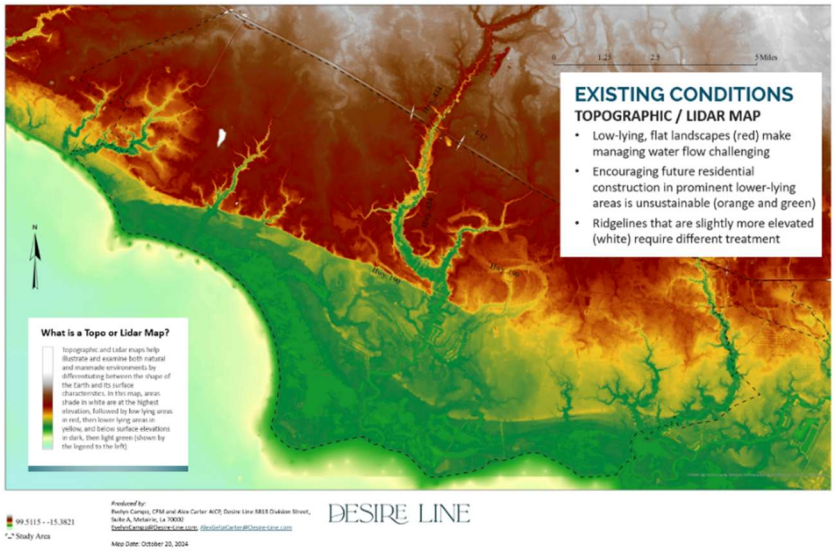


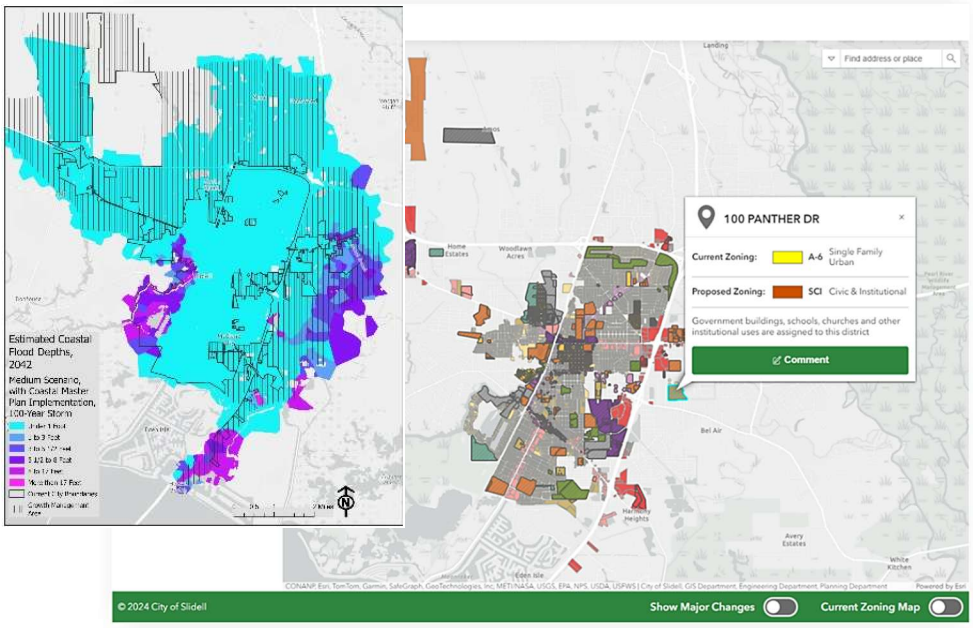
Image *(below):* Coastal Resilience Land Use Study background, findings, and recommendations presented at the 2025 State of the Coast Conference (New



Online Land Use Tools and Community Engagement

Desire Line makes the Company's work products available through online, readily accessible portals and datasets to maximize the impact of work and build local capacity to make more challenging decisions. For example, Desire Line led the City of Slidell's zoning code update to better align local regulations with the sustainability and resilience goals outlined in the Slidell2040 Comprehensive Plan. The project began with a technical evaluation of the existing zoning map, the future land use map, future coastal flood depths, and current land uses to identify inconsistencies, gaps, and opportunities to strengthen the City's approach to economic development, environmental protection, and floodplain management. Using these findings, the Team developed a new proposed zoning map designed to reduce spot zoning, create consistent street corridors, incorporate overlay districts, missing middle housing and mixed-uses, and better integrate floodplains and natural features into development considerations. A key component of this effort was the a Conservation District, which limits development in areas with important natural assets or significant flood risk.

Image *(below):* City of Slidell Interactive Mapping Tool and Coastal Flood Depths, 2042, Medium Scenario



The City of Slidell's comprehensive rezoning map and new Unified Development Code were unanimously approved by the City Council on January 13, 2026, via Ord. 26-08-3607. Online tools remain available and are being transitioned to support implementation.

To support transparency and facilitate meaningful public engagement, Desire Line created an online interactive mapping tool to communicate the development of the City of Slidell's zoning updates to the public.

The tool showed users the current zoning, the proposed new zoning, highlighted areas of significance proposed changes, and provided information on how all changes impacted property and surrounding land uses at the parcel level. Users of the online tool could then comment on a proposed change to provide site-level feedback to the Project Team. This feedback was used to follow up one-on-one with the public to address concerns or questions, and to update the draft zoning map in collaboration with City Staff, City boards and commissions, and the public at large. The tool demonstrated how interactive mapping can effectively communicate complex regulatory updates, incorporate local knowledge, and support more informed, iterative, and collaborative planning decisions.

Building on this digital engagement approach, the mapping tool developed for Slidell can be adapted for other planning and resilience efforts, including applications to visualize localized flood risk, illustrate regulatory implications, or support scenario-based decision making. Its flexibility allows municipalities, developers, and community members to better understand environmental constraints, evaluate development options, and incorporate resilience considerations into future project and planning decisions.

Proposal Components and Major Data Sources

M&N offers state-of-the-art numerical modeling and analytical capabilities, essential for analyzing drainage conditions and flood vulnerabilities in Region 8. As designers and engineers, M&N practices goal-oriented modeling, where models are used as tools to facilitate answering new questions, test solutions, perform sensitivity analyses, analyze outcomes, and help manage expectations. Advanced Geospatial Analytics enable the team to pre- and post-process immense amounts of complex data into simple, highly communicable graphics in response to user / stakeholder driven enquiries. Their decades of expertise in these types of projects enables a nimble approach to H&H modeling focusing on defining realistic goals, clarifying assumptions, and testing 'what-if' scenarios. Their in-house team of over 130 modeling specialists, and urban stormwater management Subject Matter Experts—12 of which are based in local New Orleans and Baton Rouge offices—apply state-of-the-art sophisticated tools to simulate rainfall events, assess stormwater retention potential, and optimize drainage solutions. With M&N, the Desire Line Team can leverage the entire suite of stormwater modeling platforms in the marketplace today including HEC-Suite, PCSWMM 1D and 2D, ICPR, MIKE, Infoworks, and more, depending on RPC's preferred application for future use and flood risk evaluations. Using models that M&N has developed for the Region, such as CPRA models, and knowledge of large-scale USACE models, like Donaldsonville to the Gulf, M&N can test recommendations tailored to the region.

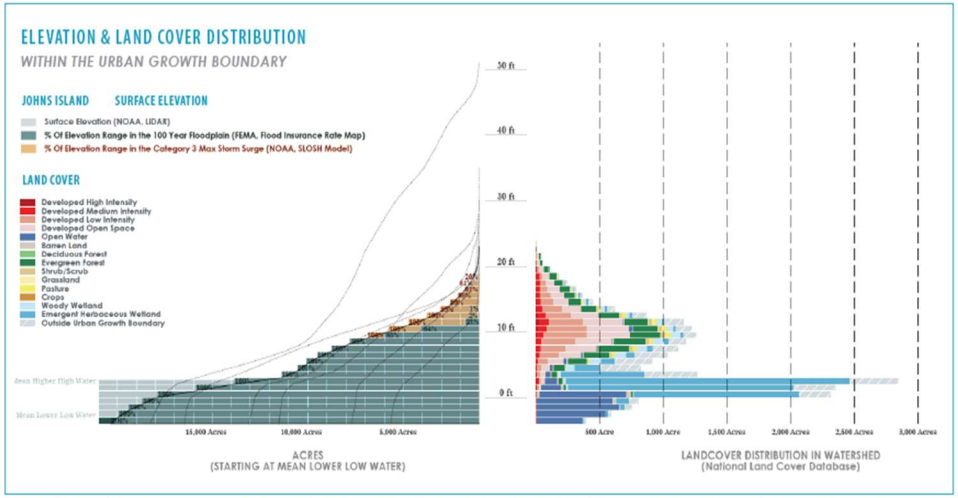
M&N uses Geographic Information Systems (GIS) and parametric tools to map, analyze, and interpret complex datasets. This approach allows them to identify spatial patterns and relationships that may not be immediately apparent, supporting data-driven planning and design decisions. M&N H&H modelers, GIS specialists, and visualization experts work hand in hand to develop engaging visualization of flood risk data in GIS to intuitively communicate complex issues and build consensus across diverse stakeholders. M&N has significant experience in developing highly informative data manipulation and presentation, graphically driven dashboards that integrate various data sources and provide analytical and visualization tools for effective decision-making.

M&N has invested in a 2528-core High-Performance Computer (HPC) cluster (the largest Supercomputer in the Private Sector today), which offers in-house "supercomputer" capabilities for numerical modeling in practical timeframes. This HPC cluster significantly increases M&N's capacity beyond typical desktop computing systems, allowing for multiple simultaneous scenario simulations at higher resolutions and over longer periods with shorter production times. Having this capability in-house provides significant advantages in terms of wait times or sequencing queues associated with other high-performance computers in academic and research institutes. M&N Tools also provides a platform for collaboration and distribution of commonly used multi-platform, multi-application engineering

tools, perform calculations, data analysis, modeling, and design. The system allows our Team to apply proven technical solutions more effectively to our projects and improve overall engineering product quality and cost-efficiency. M&N is increasingly deploying a data driven Machine Learning (ML) approach to predict environmental parameters across a wide range of watersheds, trained, and validated using historic field data observations. A ML approach enables rapid scenario analysis and quick forecasting and simplifies complex numerical modeling into an efficient predictive tool. Combining ML with M&N Tools, our Team can rapidly adapt existing efforts to date to meet the needs of this project, preserving the investment in stakeholder initiatives performed to date.

The GIS data provided by the RPC will serve as the foundation for the development of key components for modeling: including LiDAR data, hydrologic features, hydrological soils data, precipitation data, along with other available topographic surveys and be used to develop the basis of the Digital Elevation Model (DEM) and the Roadway DEM (R-DEM). In addition, the terrain developed for the indicative flood risk model will serve as the basis for the modeling terrain. Vegetation data, land cover data, and hydrologic soils data provided by the RPC will create the basis for development of the Landscape Development Intensity Index (LDII) and the Runoff Coefficients. Precipitation data from NOAA Atlas 14/15 will be utilized to create Intensity Duration Frequency (IDF) Curves throughout Region 8. This data will create the foundation for a geospatial runoff coefficient model development that reflects the complex hydrological and environmental dynamics within the region. Our Team will overlay the LDII, runoff coefficients, and the IDF Curves to rank the potential flood risk by census block group for the Pluvial Flood Risk Index (PFLI). The PFRI will highlight census block groups with a high flood-risk in various future development scenarios.

Image (right): M&N has a wealth of experience working across the county in Charleston, Wilmington, Norfolk, New Orleans, and Memphis, identifying and progressing projects from model identification to design development, permitting, and ultimately implementation. Beginning with Dutch Dialogues® Charleston and continuing through the Charleston Water Plan, M&N has studied the form and function of watersheds throughout the County. Coastal watersheds are influenced by tailwater, compound flood, and upland conditions; by soil and environmental quality; and by a variety of land use and land cover characteristics. Holistic evaluation of these factors has both confirmed Charleston drainage priorities and identified new opportunities. These experiences will provide direct value to RPC.



For the Charleston City Plan, our team graphed a multi-variable analysis of flood risk by flood elevation for all City watersheds, enabling a view of the relationships between flooding and land uses that led to the development of new policies and projects.

Model results will be depicted graphically within the GIS mapping platform to facilitate ease of communication with local governments, leadership, and the community stakeholders and organizations in Region 8. By integrating the results of the indicative flood risk analysis with relevant geospatial data, our Team will

develop a GIS dataset and public-facing dashboard to more effectively guide future development and infrastructure investment decisions in Region 8.

Through M&N, the Desire Line team can leverage the full suite of industry-standard stormwater modeling platforms—including the HEC Suite, PCSWMM (1D/2D), ICPR, MIKE, and InfoWorks—aligned with RPC's preferred tools for future application and flood risk evaluation. Existing regional models, such as CPRA frameworks and large-scale USACE systems (e.g., Donaldsonville to the Gulf), enable efficient testing of regionally tailored recommendations. Machine learning and proprietary M&N tools further accelerate adaptation of existing efforts, preserving prior stakeholder investments and eliminating the need to recreate baseline analyses.

The GIS data provided by the RPC will serve as the foundation for the development of key components for modeling: including LiDAR data, hydrologic features, hydrological soils data, precipitation data, along with other available topographic surveys and be used to develop the basis of the Digital Elevation Model (DEM) and the Roadway DEM (R-DEM). In addition, the terrain developed for the indicative flood risk model will serve as the basis for the modeling terrain. Vegetation data, land cover data, and hydrologic soils data provided by the RPC will create the basis for development of the Landscape Development Intensity Index (LDII) and the Runoff Coefficients. Precipitation data from NOAA Atlas 14/15 will be utilized to create Intensity Duration Frequency (IDF) Curves throughout Region 8.

This data will create the foundation for a geospatial runoff coefficient model development that reflects the complex hydrological and environmental dynamics within the region. Our Team will be overlaying the LDII, runoff coefficients, and the IDF Curves to rank the potential flood risk by census block group for the Pluvial Flood Risk Index. The PFRI will highlight census block groups with a high flood-risk in various future development scenarios.

Model results will be depicted graphically within the GIS mapping platform to facilitate ease of communication with municipality staff, leadership, and the communities in Region 8. By integrating the results of the indicative flood risk analysis with relevant geospatial data, our team will develop a GIS dataset and public-facing dashboard to guide future development and infrastructure investment decisions in Region 8.

Proposal Requirements and Specifications

The Pluvial Flood Risk Assessment will identify and label locations with high pluvial flood risk, be adaptable to future scenarios, and continue to function as new data is made available. The assessment will produce an online dashboard designed to support planning and policy decisions related to infrastructure and construction, water supply and quality, and floodplain, stormwater, and emergency management at the local, parish, and watershed levels.

Throughout the project, the Team will document data gaps and limitations (see **Task 2** below), implement Quality Control and Assurance (QC/QA) procedures (see **Task 10** below), and meet industry standards to create a GIS-based Pluvial Flood Risk Assessment

that incorporates geographic, hydrological, development, population, and precipitation data from the Census block group to the watershed region scales, with an online component (see **Task 9** below).

Proposal Scope of Work: The Project Team proposes to complete this Assessment through effective project management and the development of robust datasets and models that incorporate geospatial information, elevation data, landscape intensity, and flood risk indicators, supported by quality control, and detailed documentation. The proposed tasks and workflow for this Flood Risk Assessment are detailed below:

Task 1 – Project Management: The Project Team will communicate and coordinate with RPC staff through the development of a Project Management Plan outlining all project tasks, communication protocols, and quality control procedures. As part of this Plan, the Team will meet with RPC monthly to provide monthly progress reports and invoices (*see Gantt chart Task 1*). A kickoff meeting will be held to discuss the Project Management Plan and confirm expectations with RPC. All data used for the project will be archived and submitted to RPC upon project completion.

Task 2 – Data and Model Architecture: The Project Team will work in partnership with RPC to select all model components, determine the method for component integration, and ensure the soundness of the modeling methodology. Additional data, such as pump capacity and functionality within Region 8, may be needed to support this effort. The data and methodology will be integrated into a Model Architecture Report and presented to the RPC in Month 2 (*see Gantt chart Task 2*). Model platforms are established as living frameworks so that they can be continuously updated as new information, operation regimes etc. become available. This preserves the functional integrity of the model architecture so that costly cyclical updates are not needed.

Task 3 – Data Aggregation or Acquisition: Also in Month 2, the Project Team will review all available data and inform the RPC if any additional information is needed. The Team has already collected extensive planning and modeling data through work associated with the Region 6 Watershed Plan. However, it is important to note that the LWI models have limited utility inside of the Hurricane and Storm Damage Risk Reduction System (HSDRRS). Even without the LWI models, the Team can compile sufficient datasets to complete a risk assessment. The Team will document, archive, and submit any existing and additional data sources to the RPC upon project completion (*see Gantt chart Task 3*). M&N has experience integrating and standardizing model / data domains and integrating them into a single platform. M&N regularly establishes M&N Tools algorithms to access the most up-to-date data sets.

Task 4 – Geographic Base Layer Inputs and Standardization: The Project Team will compile, review, and systemize all collected data for integration into the Pluvial Flood Risk Assessment model. This process will include organizing the data into a GIS format, incorporating metadata, and documenting data sources, processing, and quality control measures (*see Gantt chart Task 4*).

Task 5 – Digital Elevation Model (DEM): The Project Team will then create a Digital Elevation Model (DEM) to model hydrologic and hydraulic processes in Region 8, with particular attention being paid to the geoid of reference for NAVD88, as this can have significant implications on coastal systems with little elevation diversity and data sets compiled from multiple sources. The DEM

will include land elevation, water flow, and watershed area information in accordance with FEMA and USACE requirements. All data within the model will be standardized and assessed for accuracy. The Project Team will document metadata for this model and submit it at the end of the project (*see Gantt chart Task 5*).

Task 6 – Road and Bridge Digital Elevation Model (R-DEM): In addition to the DEM, the Project Team will also produce a Road and Bridge Digital Elevation Model (R-DEM) to assess the impact of transportation infrastructure on the hydrologic and hydraulic analysis. This will allow the model to react to any impediments or increases in water flow due to roads, bridges, or culverts. The data in the model will be standardized and assessed for accuracy (*see Gantt chart Task 6*).

Task 7 – Landscape Development Intensity Index (LDII): After developing the elevation models, the Project Team will create a Landscape Development Intensity Index (LDII) to detect urban development and impervious surfaces throughout Region 8. The LDII will incorporate data on land development, population, buildings, and impermeable areas in Region 8, and will be used to calculate runoff in relation to development intensity. This analysis will help illustrate how development patterns influence pluvial flood risk. The index will be assessed for accuracy, analyzed, and recapped for the RPC to communicate the relationship between development and flood risk (*see Gantt Chart Task 7*).

Task 8 – Runoff Coefficient Model: The Project Team will combine the elevation models and the development intensity index with a runoff coefficient model. The Project Team will develop this model for GIS and include an attribute table and layers related to hydrologic and hydraulic analysis, along with backup documentation and metadata. The model will be standardized and assessed for accuracy (*see Gantt chart Task 8*).

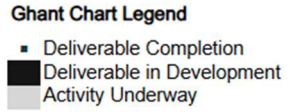
Task 9 – Pluvial Flood Risk Index: The elevation and runoff coefficient models will result in a Pluvial Flood Risk Index that supports future land use planning, floodplain and stormwater management, and emergency management. The index will be used to identify areas at risk of pluvial flooding, evaluate impacts from different types of rain events, and provide a pluvial flood risk score for areas across Region. This index will be developed for GIS and GIS online, with backup documentation and metadata for information purposes (*see Gantt chart Task 9*).

Task 10 – Quality Control, Quality Assurance (QC/QA) and Statistical Validation: Throughout the Pluvial Flood Risk Index development, the Project Team will implement Quality Control and Quality Assurance (QC/QA) procedures to ensure the accuracy and functionality of the model. The Team will develop a Validation Plan and document these procedures for RPC. The Draft and Final Validation Reports as well as the QC/QA records will be submitted upon project completion (*see Gantt chart Task 10*).

Task 11 – Documentation: During the modeling process, the Project Team will document all relevant data, metadata, methodology, and QC/QA procedures for the RPC. The Team will provide this documentation in a draft and final report, user guide, and suggested messaging regarding the Pluvial Flood Risk Index (*see Gantt chart Task 11*). The Project Team envisions this deliverable to be a supplement to the LWI models that is focused on the urban form. If selected for award, the Desire Line Team will create a digital dashboard of maps and planning tools to provide municipal staff, regional leadership, and the public (as applicable) with up-to-date, interactive information on the Pluvial Flood Risk Index.

14. Project Schedule

To efficiently progress through each task within an 8-month period, the Project Team will use a monthly schedule to accomplish each task completely and efficiently. This month-to-month approach will be key to maintaining the momentum of the project, ensuring quality work by the project team, and coordinating the alignment of datasets and modeling outputs. As demonstrated in the above Ghantt Chart, the Project Team will be assigned a deliberate and focused workflow in order to accomplish these tasks in a timely manner.



PROJECT SCHEDULE: TASK, OBJECTIVES, ACTIVITIES, & DELIVERABLES	MONTH 1	2	3	4	5	6	7	8
Task 1: Project Management								
Conduct a project kickoff meeting with RPC to confirm scope, expectations, and deliverables.								
Deliverable : Kickoff meeting summary	■							
Develop a detailed project management plan outlining task schedule, milestones, communication protocols, and quality control procedures.								
Deliverable: Project Management Plan	■							
Facilitate monthly progress meetings or conference calls with RPC.								
Submit monthly progress reports and invoices in the required format.								
Deliverable: Monthly progress reports and invoices	■	■	■	■	■	■	■	■
Maintain an organized archive of all project files, datasets, and documentation.								
Deliverable: Archive of all project-related files and data								■
Task 2: Data and Model Architecture								
Collaborate with RPC to confirm the structure, inputs, and outputs of each model component.								
Identify the types and sources of data required for each model.								
Define validation parameters and performance metrics.								
Document the modeling framework, including assumptions, dependencies, and integration points.								
Deliverable (s): Draft and final Model Architecture Report and Presentation summarizing the model architecture and development approach		■						
Task 3: Data Aggregation or Acquisition								
Review RPC-provided datasets and assess for completeness.								
Identify missing or insufficient data elements.								
Acquire supplemental datasets through aggregation, purchase, or public sources.								
Document all acquired datasets and associated licenses.								
Deliverable(s): All datasets aggregated or purchased; Documentation of data sources; and Exceptions in the Model Architecture Report								■
Task 4: Geographic Base Layer Inputs and Standardization								
Compile RPC-provided datasets per scope of work.								
Standardize all datasets to a unified coordinate system and projection compatible with RPC's GIS environment.								
Deliverable: Fully standardized geographic base layers in GIS-compatible formats and metadata for each dataset, compliant with FGDC/ISO standards								■
Perform quality checks to ensure spatial accuracy, completeness, and logical consistency.								
Prepare datasets for integration into subsequent modeling tasks (e.g., DEM, LDII, runoff coefficient model).								
Deliverable: Technical documentation describing data sources, preprocessing steps, and quality control procedures								■

Task 5: Digital Elevation Model (DEM)								
Utilize RPC-provided LiDAR datasets and supplement with publicly available elevation data as needed.								
Conduct preprocessing steps including: vertical accuracy checks, void filling, hydrologic conditioning (e.g. breaching, depression filling), and coordinate system								
Generate hydrologically relevant secondary layers: slope and aspect, flow direction and flow accumulation, and watershed and subwatershed boundaries.								
Validate DEM accuracy using ground control points, benchmarks, or other reference data consistent with USGS/NGA LiDAR Base Specifications.								
Deliverable(s): Hydrologically conditioned DEM covering the full RPC region; Derived slope, aspect, flow direction, flow accumulation, and watershed boundary layers; and Metadata and technical documentation detailing preprocessing steps, validation methods, and data sources								▪
Task 6: Road and Bridge Digital Elevation Model (R-DEM)								
Integrate RPC-provided datasets for roads, bridges, and culverts into the base DEM.								
Perform hydrologic conditioning to ensure realistic flow paths across transportation corridors, including: embedding elevation profiles of roads and bridges, accounting for hydraulic structures (e.g., culverts, overpasses) to prevent artificial flow barriers, and adjusting flow direction and accumulation rasters to reflect								
Validate the modified DEM using field-verified elevation points, design specifications, or high-resolution LIDAR data.								
Ensure hydrologic connectivity is preserved while accurately modeling transportation features.								
Deliverable(s): Hydrologically conditioned R-DEM with embedded transportation features; Updated flow direction and accumulation rasters reflecting infrastructure impacts; Seamless raster DEM incorporating roads and bridges; Derived watershed and subwatershed boundaries adjusted for transportation effects; and Metadata and technical documentation describing methodology and validation								▪
Task 7: Landscape Development Intensity Index (LDII)								
Compile and preprocess input datasets (land cover, imperviousness, population, parcels/buildings).								
Develop a geospatial model to calculate LDII values for defined spatial units.								
Validate LDII classifications using aerial imagery, local planning data, or field verification (if available).								
Create lookup tables linking LDII categories to runoff coefficients and other hydrologic variables.								
Deliverable(s): GIS-based LDII layer; LDII–Runoff Coefficient lookup table; summary maps and statistics ; and metadata and technical documentation								▪
Task 8: Runoff Coefficient Model								
Integrate datasets into a GIS-based modeling framework								
Calculate runoff coefficients for each polygon (e.g., block group, subwatershed, parish) using industry-standard hydrologic methods.								
Link each polygon to its associated environmental attributes in the model's attribute table.								
Conduct scenario testing to evaluate runoff under varying precipitation and land use conditions.								
Deliverable(s): GIS layer (ESRI Geodatabase); Attribute tables; Derived hydrologic layers; Technical documentation; and Metadata								▪
Task 9: Pluvial Flood Risk Index								
Integrate outputs from the Runoff Coefficient Model and LDII to calculate flood risk scores.								
Incorporate precipitation scenarios (historical, IDF-based, projected climate events) to simulate flood risk under varying conditions.								
Normalize and weight contributing factors (e.g., slope, imperviousness, soil type, vegetation) to produce a composite risk score.								
Map flood risk hotspots and generate summary statistics for use in planning and policy development.								
Deliverable(s): GIS-based Pluvial Flood Risk Index layer with block group-level resolution; Scenario maps showing flood risk under different rainfall and development conditions; Analytical tables and summary statistics; and Metadata and technical documentation detailing methodology, assumptions, and								▪

Ghant Chart Legend

- ▪ Deliverable Completion
- ■ Deliverable in Development
- Activity Underway

Task 10: Quality Control, Quality Assurance (QC/QA) and Statistical Validation								
Conduct QC/QA checks on all input datasets, including: spatial accuracy and coordinate system alignment, attribute completeness and logical consistency, and identification and correction of duplicate, outdated, or erroneous records.								
Apply QC/QA protocols to all model outputs, including runoff coefficients, LDII, and the Pluvial Flood Risk Index.								
Develop and implement a Validation Plan that includes: calibration using observed hydrologic data (e.g., flow measurements, flood records), independent validation using external datasets or benchmarks, sensitivity and uncertainty analysis to assess model robustness, performance evaluation using metrics such as: Nash-Sutcliffe Efficiency (NSE), Percent Bias (PBIAS), and Root Mean Square Error (RMSE).								
Deliverable(s): Draft Validation Report: Summary of validation parameters, methods, and preliminary results submitted electronically in Microsoft Word format; Final Validation Report: Comprehensive documentation of final validation results, performance metrics, and conclusions submitted electronically in Microsoft Word format; and QC/QA Documentation: Description of error detection methods, corrective actions, and quality assurance protocols, and Metadata for all validated datasets, compliant with FGDC/ISO standards								▪
Task 11: Documentation								
Document all model components, including inputs, processing steps, and outputs.								
Describe estimation procedures, validation methods, and assumptions.								
Ensure metadata for all datasets conforms to FGDC/ISO standards.								
Deliverable(s): Draft and final model development report; Brief user guide and talking points for communicating usage, limitations, and constraints; and Metadata for all model outputs.								▪

Ghant Chart Legend

- ▪ Deliverable Completion
- ■ Deliverable in Development
- Activity Underway

15. Cost and Budget

Provide the proposed cost for conducting this study and producing the deliverables described in the scope. Include a budget that has line items, by firm, for labor (budget by personnel member is not necessary), travel, proposed profit, and other major costs associated with the narrative described in Section 13.

Firm	Estimated Hours	Labor	Fringe	Travel	Proposed Profit	Total
Desire Line Tasks						
Task 1: Project Management	420	$26,689.63	$8,006.89	$-	$15,479.98	$50,176.50
Task 3: Data Aggregation or Acquisition	227	$10,679.05	$3,203.72	$-	$6,193.85	$20,076.62
Task 4: Geographic Base Layer Inputs and Standardization	515	$24,129.18	$7,238.75	$-	$13,994.93	$45,362.86
Task 7: Landscape Development Density Index (LDDI)	490	$29,321.54	$8,796.46	$-	$17,006.49	$55,124.49
Task 11: Documentation	515	$29,161.55	$8,748.47	$-	$16,913.70	$54,823.72
Moffatt and Nichol Tasks						
Task 2: Data and Model Architecture	148	$13,469.15	$4,040.75	$-	$7,812.11	$25,322.00
Task 5: Digital Elevation Model (DEM)	318	$28,054.25	$8,416.28	$-	$16,271.47	$52,741.99
Task 6: Road and Bridge Digital Elevation Model (R-DEM)	204	$18,407.44	$5,522.23	$-	$10,676.32	$34,605.99
Task 8: Runoff Coefficient Model	184	$17,247.87	$5,174.36	$-	$10,003.76	$32,426.00
Task 9: Pluvial Flood Risk Index	181	$17,361.17	$5,208.35	$-	$10,069.48	$32,639.00
Task 10: Quality Control, Quality Assurance (QC/QA) and Statistical Validation	230	$24,835.11	$7,450.53	$-	$14,404.36	$46,690.01
					Project Total Costs	**$449,989.17**

The proposed cost and budget table includes a calculation of estimated hours, labor costs, fringe benefits, travel costs (travel costs are estimated to be $0), proposed profit, and totals. This assumes the use of staff whose resumes are included, within the categories of Principal, Planner, GIS Analyst, Administrative, Other – FP Manager (same rate as Planner), Environmental Pro, Graphics, Principal Engineer, Engineer / Scientist III, Senior Technician, and Supervisor (Other), using DOTD rates, including the DOTD rates allowed for Moffatt and Nicol. The costs here include a multiplier to the hourly costs for 0.30 (fringe benefits) and the Desire Line team is not proposing indirect cost reimbursement as a part of this contract.

16. Staff Experience:

Firm employed by: **Desire Line LLC**					
Name	**Alexandra G. Carter, AICP**		Years of relevant experience with this employer	>4	
Title	Founder & CEO, Principal, Planner		Years of relevant experience with other employer(s)	>12	
Degree(s) / Years / Specialization			Master of Urban & Regional Planning, 2011, University of New Orleans, LA (4.0 GPA) BFA, 2009, Loyola University New Orleans, LA (4.0 GPA)		
Discipline	Urban Planning	Certifications	Certified Urban & Regional Planner (AICP)		
Contract role(s) / brief description of responsibilities			Principal		

Experience (2011-Present)	*Experience and qualifications relevant to this project:* Ms. Carter's experience facilitating the Region 6 Steering Committee and producing a Watershed Plan for Region 6 as well as her previous experience at the Office of Community Development managing and programming the Louisiana Watershed Initiative makes her well-suited to lead the Flood Risk Assessment Team as Principal in development of the Pluvial Flood Risk Index.
5/24–12/26 (*Ongoing*)	**Louisiana Watershed Initiative, Region 6 Watershed Plan.** Since 2024, Desire Line has worked with the South Central Planning and Development Commission to facilitate the Region 6 Steering Committee and work toward producing a Watershed Plan for Region 6. As Principal, Ms. Carter oversees all tasks in the Watershed Plan development. The Plan takes a comprehensive approach to flood risk reduction, is tailored to the unique concerns of Region 6, and analyzes local flood patterns, vulnerabilities, and community needs specific to the area.
1/25–1/26 (*Complete*)	**City of New Orleans Transient Lodging Study.** In 2025, the City selected Desire Line to complete a Transient Lodging Study. As Principal. Ms. Carter oversees outreach and engagement, analysis, and final recommendations. The Study aims to develop policy recommendations for CSTRs and other transient lodging uses that balance neighborhood safeguards and permanent housing, and tourism and business growth, and sustainability.
5/24–12/25 (*Complete)*	**City of Mandeville, 2045 Comprehensive Plan.** Desire Line was selected to lead the City's Comprehensive Plan process. As Principal, Ms. Carter led all aspects of the Plan development, encompassing outreach and engagement, Plan drafts, and presentations. The Plan includes an assessment of land use and zoning, parks and recreation, economic development and business, environmental sustainability and hazard mitigation, community character and placemaking, historic preservation, infrastructure, transportation, housing and neighborhoods, art and culture, and health resources.
10/24–10/25 (*Complete*)	**Alliance to St. Jude Targeted Market Study.** All South Consulting Engineers and Desire Line, in partnership with Plaquemines Parish Economic Development, LED, and GNO, Inc., developed this Study to focus on future development opportunities in an area central to the West Bank of Plaquemines Parish, specifically from Alliance to St. Jude. As Principal, Ms. Carter oversaw all aspects of the Study development, including outreach and engagement, presentations to economic development organizations, a final report, and cut sheets for potential development in the future.

1/24–1/26 (*Complete*)	**St. Tammany Bayou Liberty Coastal Resilience Study.** In response to two moratoriums limiting development in Districts 11 and 7, Ms. Carter led a land use and resilient infrastructure study south of I-12 in coordination with Council members, Parish staff, community groups, and key stakeholders. The Study assessed existing conditions, land use patterns, and mapping data; evaluated existing development trends and parishwide planning efforts, including climate mitigation efforts, flood risk; and identified opportunities to support more sustainable future development patterns and infrastructure investments.
10/23–3/25 (*Complete*)	**Lower St. Bernard/Louisiana International Terminal Roadway Network and Resilience Study.** RPC selected GIS Engineering to complete this Resilience Study, with community outreach support from Desire Line. As Principal, Ms. Carter led the public outreach effort, which included the development of an Outreach and Engagement Plan, stakeholder interviews, and the facilitation of community meetings to receive feedback on the Study.
10/22–11/23 (*Complete*)	**Tangipahoa Parish, 2045 Comprehensive Plan.** In 2022, Tangipahoa Parish selected Desire Line to update its Comprehensive Plan, and address the challenges associated with unplanned growth. As Principal, Ms. Carter oversaw all tasks associated with the Comprehensive Plan development. The Plan includes significant public input, analysis, and recommendations. Plan website: https://www.tangi-2045.com/.
11/22–8/23 (*Complete*)	**St. John the Baptist Parish, Resilient Housing Plan.** St. John applied for, and received, a grant to be a Pilot Community for the development of a Resilient Housing Plan with a multidisciplinary team of stakeholders across the Gulf Coast. As Principal, Ms. Carter oversaw the Plan development, which focused on illustrating how resource-limited jurisdictions can adapt to changing conditions by tapping regional partnerships to achieve long-term planning goals. The Plan received an Excellence Award for a Plan from the Louisiana Chapter of the American Planning Association.
01/23–08/23 (*Complete*)	**St. Tammany Parish, CDBG-ENT Community Needs Assessment, 2023-2027 Action Plans and Consolidated Plans.** To receive HUD CDBG entitlement funds, eligible communities must assess community needs and submit an application for approval that describes how funds will be programmed and spent to support these needs. As Principal, Ms. Carter oversaw development and implementation of the Parish Community Needs Assessment, Action, and Consolidated Plans, which—together—were successfully submitted in August 2023.
09/18-09/21	**Office of Community Development, LA.** As Resilience Planning Manager, Ms. Carter has extensive experience managing interagency projects and teams. She directly managed and programmed the expenditure of $1.2 billion in HUD CDBG-MIT funds to implement the Louisiana Watershed Initiative (LWI), managing over 15 working groups, 20 agreements, and 35 active task orders, and facilitating the award of over $500M in projects. Ms. Carter developed LWI Round 1 project criteria, and entered into, and directly managed, agreements with DOTD.

Firm employed by: **Desire Line LLC**				
Name	**Jared Carter**	Years of relevant experience with this employer	>4	
Title	Professional	Years of relevant experience with other employer(s)	>16	
Degree(s) / Years / Specialization		BS in Sociology (2007) Loyola University New Orleans, New Orleans, LA National Register EMT (2013), Delgado Community College, New Orleans, LA		
Discipline	Emergency Response Expert, Financial Analyst, Project Management, Field Team Management, Meeting Logistics, Research Analysis, Trainer		Certifications	N/A
Contract role(s) / brief description of responsibilities		Administrative		

Experience (2007–Present)	*Experience and qualifications relevant to this project:* Jared's experience supporting the logistics of the Region 6 Watershed Plan, including meeting facilitation, overseeing the budget, as well as keeping the Project Team in line with the approved scope of work will allow him to support the Flood Risk Assessment as a Professional. His previous experience managing invoices, overseeing budgets, and aligning Project Teams with project goals will help support the Project Team and coordinate with project stakeholders to complete the Pluvial Flood Risk Index successfully.
5/24–12/26 (*Ongoing*)	**Louisiana Watershed Initiative, Region 6 Watershed Plan.** Mr. Carter oversees staff time management, provides budget oversight, meeting logistics, and supports client coordination, and project alignment with approved scope of work and services.
1/25–1/26 *(Complete)*	**City of New Orleans Transient Lodging Study.** Mr. Carter oversees invoice management, provides budget oversight, and project alignment across the team.
5/24–12/25 (*Complete)*	**City of Mandeville, 2045 Comprehensive Plan.** Mr. Carter oversaw invoice management, provided budget oversight, and project alignment across the team.
10/24–10/25 (*Complete*)	**Alliance to St. Jude Targeted Market Study**. Mr. Carter oversaw invoice management, provided budget oversight, and project alignment across the team.
2/25 –10/25 (*Complete*)	**City of Slidell Repetitive Loss Area Analysis.** Mr. Carter oversaw invoice management, provided budget oversight, and project alignment across the team.
1/24–1/25 (*Complete*)	**St. Tammany Bayou Liberty Coastal Resilience Study.** Mr. Carter oversaw invoice management, provided budget oversight, and project alignment across the team.
5/23–5/25 (*Complete*)	**ReCoast, Terrebonne Parish.** Mr. Carter oversaw invoice management, provided budget oversight, and project alignment across the team.
10/23–3/25 (*Complete*)	**Lower St. Bernard/Louisiana International Terminal Roadway Network and Resilience Study.** Mr. Carter oversaw invoice management, community engagement, provided budget oversight, and project alignment across the team.

10/22–11/23 *(Complete)*	**Tangipahoa Parish, 2045 Comprehensive Plan.** Mr. Carter oversaw invoice management, community engagement, provided budget oversight, and project alignment across the team.
11/22–8/23 *(Complete)*	**St. John the Baptist Parish, Resilient Housing Plan.** Mr. Carter oversaw invoice management, coordinated meeting logistics, provided budget oversight, and project alignment with approved scope of work and services.
01/23–08/23 *(Complete)*	**St. Tammany Parish, CDBG-ENT Community Needs Assessment, 2023-2027 Action Plans and Consolidated Plans.** Mr. Carter oversaw invoice management, provided budget oversight, and project alignment across the team.
9/21–11/21 (*Complete*)	**Jefferson Parish Integrated Green Infrastructure Strategy.** Mr. Carter oversaw invoice management, provided budget oversight, and project alignment across the team.
2007–2023 *Work History*	**New Orleans Fire Department – Fire Captain.** • Received a Medal of Commendation from the NOFD for outstanding duties performed (2019) • Member of Specialized "Flying Squad" NOFD Heavy Rescue Unit as both Firefighter (2011 - 2016) and Captain (2016 - 2021) • Received a New Orleans City Council Proclamation for USAR work performed in Tuscaloosa, AL (2011) • Received Unit Commendation for rescue work performed (2009) • 16-year member of the New Orleans Fire Department (Sept. 2007- 2023) • 14-year Nationally Registered EMT in good standing (2009 – Present) • 14-year member of LA Urban Search and Rescue Team in good standing (2009 - 2023) • 8-year member of Gulf States Dive and Rescue Team (2010 – 2018)

Firm employed by: **Desire Line LLC**				
Name	**Evelyn Campo, CFM**	Years of relevant experience with this employer	>4	
Title	Supervisor	Years of relevant experience with other employer(s)	>11	
Degree(s) / Years / Specialization	Master of Urban and Regional Planning (MURP) (2013), specialization in Environmental and Hazard Mitigation Planning; Hazard Planning Certificate, 10 years (2013); ASFPM Certified Floodplain Manager (CFM) / 10 years (2013)			
Discipline	Certified Floodplain Manager (CFM)	Certifications	Certified Floodplain Manager (CFM)	
Contract role(s) / brief description of responsibilities			Planner	

Experience (2011-Present)	*Experience and qualifications relevant to this project:* As a former Resilience Planning Specialist with the Office of Community Development (2019-2021), coastal zone administrator in St. John Parish (2017-2019), and current LFMA board member, Ms. Campo has managed the development and completion of initiatives focused on advancing community goals and objectives, identifying appropriate funding sources, and supporting sustainable growth, climate adaptation, and disaster resilience. A seasoned project manager for state and federal infrastructure projects, her experience with project management, including schedule and budget development, staff oversight, ongoing and final deliverable review and quality control, internal milestone, task, and timeline management will allow her to supervise the Pluvial Flood Risk Index effectively throughout the project.
5/24–12/26 (*Ongoing*)	**Louisiana Watershed Initiative, Region 6 Watershed Plan.** Ms. Campo facilitates community engagement and outreach, leads Steering Committee meetings, and supervises all tasks in the Watershed Plan development.
1/25-1/26 (*Complete)*	**City of New Orleans Transient Lodging Study.** Ms. Campo supervised outreach and engagement, analysis, mapping, and final recommendations for the Study.
5/24–12/25 *(Complete)*	**City of Mandeville, 2045 Comprehensive Plan.** Ms. Campo supervised all aspects of the Plan development, encompassing outreach and engagement, Plan drafts, and presentations.
2/25–10/25 (*Complete*)	**City of Slidell Repetitive Loss Area Analysis.** The City of Slidell tasked Principal Engineering and Desire Line to complete a Repetitive Loss Area Analysis (RLAA) for 11 repetitive loss areas in the city. An RLAA is a report that communities produce so that they can reduce flood risk over time and enhance community resilience to future flooding. As Supervisor, Ms. Campo led the site visits, data collection, recommendations and findings for flood mitigation. The final report provides recommendations for structural and nonstructural flood mitigation for individual structures.
1/24–1/26 (*Complete*)	**St. Tammany Bayou Liberty Coastal Resilience Study.** Ms. Campo provided Desire Line staff oversight and management support, as well as leading multiple innovative mapping and policy recommendations within this land use and resilient infrastructure study south of I-12.

5/23–5/25 (*Complete*)	**ReCoast, Terrebonne Parish.** Tulane University contracted with Desire Line to assist in the development of an Environmental Compliance Plan for four proposed restoration projects in Terrebonne Parish. The restoration projects included restoring coastal sites using recycled glass sand. Ms. Campo oversaw the submittal of permit applications, assisted with agency responses, and aided in environmental reviews.
10/23–3/25 (*Complete*)	**Lower St. Bernard/Louisiana International Terminal Roadway Network and Resilience Study.** Ms. Campo provided oversight for the public outreach effort.
10/22-1/23 (*Complete*)	**Tangipahoa Parish, 2045 Comprehensive Plan.** Ms. Campo's floodplain management and CDBG background enabled the development of a "Hazards First" approach to long-term community growth reflective of transportation network challenges and social vulnerability.
11/22–8/23 (*Complete*)	**St. John the Baptist Parish, Resilient Housing Plan.** Ms. Campo's work history in St. John enabled a targeted and focused approach that positioned the Parish to better receive and effectively use federal, state and philanthropic funding within a limited budget and over a short plan development time frame (6 months).
01/23-08/23 (*Complete*)	**St. Tammany Parish, CDBG-ENT Community Needs Assessment, 2023-2027 Action Plans and Consolidated Plans.** Ms. Campo's work history with the Louisiana Watershed Initiative and her direct understanding of infrastructure and flooding challenges in the Parish enabled the development of efficient and feasible CDBG-ENT program recommendations, re: roads, sewer, water, and flood insurance policies.
9/21-11/21 (*Complete*)	**Jefferson Parish Integrated Green Infrastructure Strategy.** In 2018, the Jefferson Parish Council initiated the development of a Green Infrastructure Plan as part of the Comprehensive plan update, including an integrated stormwater management strategy to improve drainage on the east and west banks of the Parish. The Parish contracted Volkert, Meyer Engineers, and Desire Line to complete this strategy. Ms. Campo assisted with the citizen participation, assessment, and drafting of the strategy, which supports continued advancement of green stormwater infrastructure.

Firm employed by: **Desire Line LLC**				
Name	**Jessi Kenney, PhD, MPH**	Years of relevant experience with this employer	4	
Title	Professional	Years of relevant experience with other employer(s)	>11	
Degree(s) / Years / Specialization	Doctor of Public Health (2016) Tulane School of Public Health and Tropical Medicine, Focus in Environmental Toxicology and Risk Perception/Communication; Master of Public Health (2011), LSU Health Sciences Center School of Public Health, New Orleans LA; 12 yrs; Focus in Environmental Aspects of Disaster Recovery and Community Resilience; Bachelors of Science (2009) Tulane University School of Science and Engineering, New Orleans LA (2009)			
Discipline	Public Health	Certifications	N/A	
Contract role(s) / brief description of responsibilities			Environmental Pro	
Experience (2011-Present)	*Experience and qualifications relevant to this project:* Dr. Kenney is a multi-degreed public health professional with over 10 years of experience in environmental and community assessments and management of projects, budgets, and staff. She has experience in both academic research and private sectors throughout the Gulf South. She was responsible for the study design, implementation, all database collection and management, and community outreach for the $5 million NIH-funded GROWH Consortium following the BP Oil Spill, which sought to improve research translation and public dissemination strategies based on environmental health data, social and behavioral change theories, and risk communication strategies to build a stronger, more transparent relationship between researchers, policymakers, and the public. She has a reputation for fostering multi-agency collaborations that guide policy design and improve data-driven decisions impacting local community stakeholders. Her experience with public dissemination and communication will provide the Project Team with needed expertise in creating communication and outreach materials for the Pluvial Flood Risk Index, and inform the information needed for the planning tool.			
6/22–7/23 (*Complete*)	**Strategic Grants Management and Development Services, New Orleans, LA.** On behalf of Resilience Force, Louisiana, Dr. Kenney developed grant applications for the DOL FARE Grant Program, the Office of Minority Health, the DOTD Reconnecting Communities Pilot Discretionary Grant Program, and the FCC Affordable Connectivity Outreach Grant Program.			
1/23–8/23 (*Complete*)	**St. Tammany Parish, CDBG-ENT Community Needs Assessment, 2023-2027 Action Plans and Consolidated Plans.** Dr. Kenney supported community outreach, plan, and program development.			
10/22–11/23 (*Complete*)	**Tangipahoa Parish, 2045 Comprehensive Plan.** Dr. Kenney supported plan review and development with an emphasis on providing benefits to vulnerable populations.			

3/23–Present (*Ongoing*)	**City of Kenner, Strategic Grants Management.** Project Manager responsible for client coordination, invoicing, budget oversight, cost estimation coordination, and managing staff responsible for data collection and analysis, as well as grant development, submittal, and monitoring.
2016–2021 *Work History*	**Director of Southeast Operations, Vector Disease Control International, A Rentokil Company, Southeastern U.S.** • Supervised large-scale, long-term disease surveillance and vector control programs throughout MS, AL, FL, and GA in an effort to protect public health, improve quality of life, and minimize negative economic impact due to nuisance and disease-capable vectors. • Coordinated all employee relations involving recruitment, training, performance management and talent development; scheduled and supervised all daily field and lab operations for 9 direct reports and 50+ indirect reportees over 11 municipal and government agency contracts. • Provided quality assurance and pesticide/safety compliance for all field and lab operations, reviewed all application reports for accuracy and completeness, ensuring actions were scientifically justified, posing minimal threat to non-target organisms or citizens.
2011–2016 *Work History*	**Lead Researcher and Study Supervisor, Gulf Resilience on Women's Health Consortium, Tulane School of Public Health and Tropical Medicine.** • In collaboration with Mary Queen of Vietnam Community Development Corporation and Bayou Interfaith Shared Community Organizing as the study's community partners, mixed-method in home and at-clinic assessments were used in an effort to facilitate better-informed decision making for vulnerable community members through effective, trusted risk communication

Firm employed by: **Desire Line LLC**				
Name	Tara Lambeth, PhD, AICP, CFM	Years of relevant experience with employer	>1	
Title	Senior Planner, Certified Floodplain Manager	Years of relevant experience other employer(s)	>12	
Degree(s) / Years / Specialization	Doctor of Philosophy in Urban Studies, University of New Orleans, 2016 Master of Science, City and Regional Planning, Pratt Institute, 2012 Bachelor of Fine Arts, Film & Television/Dramatic Writing, New York University, 2005			
Discipline	Planning and Floodplain Management	Certifications	Certified Urban & Regional Planner (AICP) Certified Floodplain Manager (CFM)	
Contract role(s) / brief description of responsibilities		Planner		
Experience *(2012-Present)*	*Experience and qualifications relevant to this project:* Dr. Lambeth is a senior planner and floodplain manager with experience in community outreach and engagement, stormwater management, hazard mitigation, and emergency management at the local and parish levels. Prior to working for Desire Line, she was the Director of Planning & Zoning for St. John the Baptist Parish, Assistant Director of Planning & Zoning for Terrebonne Parish, and Assistant Director and Research Professor for UNO-CHART. Dr. Lambeth's experience with hazard mitigation, outreach and engagement, and emergency management will help her support communication, analysis, and final tool development for the Pluvial Flood Risk Index's use at the local, regional, and state levels.			
5/24–12/26 (*Ongoing*)	**Louisiana Watershed Initiative, Region 6 Watershed Plan.** Dr. Lambeth contributed to the outreach and engagement and Watershed Plan development.			
1/25 –1/26 (*Complete*)	**City of New Orleans Transient Lodging Study.** Dr. Lambeth assisted with outreach and engagement, analysis, and final recommendations.			
2/25–10/25 (*Complete*)	**City of Slidell Repetitive Loss Area Analysis.** Dr. Lambeth contributed to the site visits, data collection, recommendations and findings for flood mitigation.			
10/24–10/25 (*Complete*)	**Alliance to St. Jude Targeted Market Study.** Dr. Lambeth assisted with the development of the Study analysis, presentations, and final report.			
10/23–3/25 (*Complete*)	**Lower St. Bernard/Louisiana International Terminal Roadway Network and Resilience Study.** Dr. Lambeth assisted with the community outreach and engagement efforts.			
2021–2024 (*Work History*)	**Planning & Zoning Director and Coastal and Water Management Division Lead, St. John the Baptist Parish.** Directed the Permits, Code Enforcement, and Coastal and Water Management Divisions, coordinated and administered local, state, and federal planning policies and procedures, managed resilience projects for coastal protection and restoration, complete streets, ecotourism, green infrastructure, stormwater management, housing, and historic preservation, identified grant and project opportunities, and led damage assessment activities after disaster events.			

2019–2021 (*Work History*)	**Assistant Director of Planning & Zoning, Terrebonne Parish.** Supervised the Regulatory Division of the Planning and Zoning Department, coordinated and administered local, state, and federal floodplain management policies and procedures, coordinated and administered the Community Rating System program, participated in disaster management and damage assessments during disaster events, and conducted community outreach and engagement for planning projects.
2014–2019 (*Work History*)	**Assistant Director and Research Professor, UNO-CHART.** Drafted, analyzed, and updated plans, policies, and strategies for multiple parishes and the state, performed process and outcome evaluations of community engagement planning processes, researched, wrote, and edited grant proposals, and managed local, state, and federal grants, taught graduate level planning courses for the Department of Planning and Urban Studies, designed presentations, guidebooks, plans, strategies, and illustrations for planning projects, and created brochures, posters, and manuals for outreach and promotions.

Firm employed by: **Desire Line LLC**				
Name	**Kara Dudek-Mizel, AICP**	Years of relevant experience with this employer	2	
Title	Planner	Years of relevant experience with other employer(s)	10	
Degree(s) / Years / Specialization	Bachelor of Arts in Urban and Regional Planning, University of Illinois at Urbana-Champaign (2015); Green Infrastructure Practitioner (GIP); National Green Infrastructure Certification Program (2020 to Present); American Institute of Certified Planners (2019 to Present); Remote Pilot Certificate Federal Aviation Administration (2021 to Present)			
Discipline	Planner, Green Infrastructure Practitioner	Certifications	Certified Urban & Regional Planner (AICP); GIP – Green Infrastructure Practitioner; FAA Remote Pilot Certificate	
Contract role(s) / brief description of responsibilities	Planner			
Experience dates (2015-Present)	*Experience and qualifications relevant to this project:* Ms. Dudek-Mizel is an accomplished planner, GIS specialist, Grants Analyst, and Green Infrastructure Subject Matter Expert. She has extensive experience implementing climate action planning projects, submitting and managing grants, developing targeted funding strategies, and leading community engagement. Prior to working with Desire Line, she was a Park Planner for the Urbana Park District in Illinois where she applied for and secured over $11.3M in recreational amenity grants, while completing master plans, accessibility updates, and community outreach and engagement processes. As a former instructor at the University of Illinois and as a Climate Ambassador volunteer, she continuously demonstrates a commitment to public involvement, climate adaptation, and public education. Kara's experience in community education and engagement, planning, and green infrastructure will help support the Pluvial Flood Risk Index communication and outreach efforts throughout the project.			
10/25–Present (*Ongoing*)	**Bayou Bonfouca Revitalization Plan, City of Slidell.** The City of Slidell tasked Desire Line with completing a Revitalization Plan for Bayou Bonfouca in the Port of Slidell Corridor. The Plan will include a market and economic analysis, map of current infrastructure, wayfinding sign recommendations, and a resource roadmap for brownfield sites. Ms. Dudek-Mizel oversees all of these elements, as well as outreach and engagement with the community regarding the Plan.			
5/24–Present (*Ongoing*)	**Louisiana Watershed Initiative, Region 6 Watershed Plan.** Ms. Dudek-Mizel contributed to the outreach and engagement and Watershed Plan development.			
1/25–12/25 (*Complete)*	**City of New Orleans Transient Lodging Study.** Ms. Dudek-Mizel assisted with outreach and engagement and website development.			
5/24–12/25 (*Complete)*	**City of Mandeville, 2045 Comprehensive Plan.** Ms. Dudek-Mizel contributed to all aspects of the Plan development, encompassing outreach and engagement, Plan drafts, and presentations.			

2024–Present	**Strategic Planning Consulting Services – City of Covington, La.** Staff augmentation, including land use analysis, for the City's Planning Department.
11/23-Present	**BRIC & DRA Grant Application Preparation and Grants Management and Strategic Support – City of Kenner, La.** Submitted multiple grants in support of more resilient drainage and wastewater infrastructure.
10/23–3/25 (*Complete*)	**Lower St. Bernard/Louisiana International Terminal Roadway Network and Resilience Study.** Ms. Dudek-Mizel assisted with the community outreach and engagement efforts.
10/22–11/23 (*Complete*)	**Tangipahoa Parish, 2045 Comprehensive Plan.** Ms. Dudek-Mizel assisted with the plan development and community outreach and engagement efforts.
2018–2023 *Work History*	**Park Planner, Urbana Park District - Urbana, Illinois** • Created and applied the Urbana Park District's Climate Action, Resilience, Education, and Sustainability (CARES) Plan • Authored and managed implementation of the APA-Illinois award winning Urbana Park District Strategic Plan 2020 • Collaborated on design and construction of environmental restoration and green infrastructure projects • Engaged the community to gather input through in-person and virtual meetings, surveys, tabling, interactive maps and children's activities • Coordination of all conceptual and master planning processes and products • Worked as ADA Coordinator to advance the ADA Transition Plan and advocate for universal design principles • Used drone photography to track project progress and streamline decision making • Employed ESRI ArcGIS Desktop and Online as well as Adobe Illustrator, Photoshop and InDesign as means to communicate effectively

<table>
<tr><td colspan="5">Firm employed by: Desire Line LLC</td><td rowspan="3">  </td></tr>
<tr><td>Name</td><td colspan="2">Walter “Eric” Lundin, CFM</td><td>Years of relevant experience with this employer</td><td>> 4</td></tr>
<tr><td>Title</td><td colspan="2">Planner, Certified Floodplain Manager</td><td>Years of relevant experience with other employer(s)</td><td>35</td></tr>
<tr><td>Degree(s) / Years / Specialization</td><td colspan="4">Master of Urban and Regional Planning (2012), University of New Orleans
Masters Operational Studies (2002), U.S. Marine Corps Command and Staff College
Masters Military Studies (2001), U.S. Marine Corps Command and Staff College
Bachelors in Political Science (1987), Tulane University</td></tr>
<tr><td>Discipline</td><td>Floodplain Management</td><td>Certifications</td><td colspan="2">Certified Floodplain Manager (CFM)</td></tr>
<tr><td colspan="2">Contract role(s) / brief description of responsibilities</td><td colspan="4">Floodplain Manager</td></tr>
<tr><td>Experience dates (2011 - Present)</td><td colspan="5">Experience and qualifications relevant to this project: Eric is a retired U. S. Marine Corps Lieutenant Colonel, Senior Planner and Floodplain Manager and has lead planning efforts spanning the spectrum of military and urban environment to include water and wastewater projects, land use and zoning, outreach, economic development, transportation, floodplain management, historic preservation, and grants management. Eric’s in depth knowledge of land use, outreach, and floodplain management will inform his efforts as a Planner for the Pluvial Flood Risk Index deliverables and planning tool.</td></tr>
<tr><td>2/25 – 10/25 (Complete)</td><td colspan="5">City of Slidell Repetitive Loss Area Analysis. Mr. Lundin contributed to the site visits and data collection, and provided floodplain management expertise.</td></tr>
<tr><td>10/24 – 10/25 (Complete)</td><td colspan="5">Alliance to St. Jude Targeted Market Study. Mr. Lundin assisted with the development of the Study analysis, presentations, and final report.</td></tr>
<tr><td>5/23 – 5/25 (Complete)</td><td colspan="5">ReCoast, Terrebonne Parish. Mr. Lundin contributed to the submittal of permit applications, assisted with agency responses, and aided in environmental reviews.</td></tr>
<tr><td>10/23 – 3/25 (Complete)</td><td colspan="5">Lower St. Bernard/Louisiana International Terminal Roadway Network and Resilience Study. Mr. Lundin assisted with the community outreach and engagement efforts.</td></tr>
<tr><td>10/22 – 11/23 (Complete)</td><td colspan="5">Tangipahoa Parish, 2045 Comprehensive Plan. Mr. Lundin contributed to the plan development and community outreach and engagement efforts.</td></tr>
<tr><td>2019 – 2022 Work History</td><td colspan="5">Planning and Zoning and Building Department, Director, City of Slidell, La. Managed department of 10 responsible for planning and zoning, historic prevention, transportation planning, building code compliance, code enforcement, and City permitting process.</td></tr>
<tr><td>2012 – 2019 Work History</td><td colspan="5">Planning and Zoning and Building Department, Planner, City of Slidell, La. Certified by Louisiana Department of Transportation as a Responsible Charge for Federal Highway projects. In this capacity, Eric planned and oversaw construction of road, bicycle, and pedestrian projects.</td></tr>
</table>

1987 – 2009 *Work History*	**Infantry and Operational Plans Officer, United States Marine Corps, United States and overseas.** • *Chief of Plans, Combined Joint Task Force Horn of Africa (2002)*. Planned and managed military and military support to civilian operations in Kenya, Somalia, Ethiopia, Eritrea, Sudan, and Yemen. • *Chief of Plan, Multi-National Force West, Al Anbar Province Iraq (2008)*. Planned military and military support to civilian operations in Al Anbar Province, Iraq. • *Director G-3, Second Marine Division (2009)*. Responsible for training and deploying forces worldwide and managing day-to-day operations for 30 subordinate units of over 23,000 personnel.

Firm employed by: **Desire Line LLC**				
Name	**Hannah Rachlis, CFM**	Years of relevant experience with this employer	>3	
Title	Planner, Certified Floodplain Manager	Years of relevant experience with other employer(s)	3	
Degree(s) / Years / Specialization	Master of Urban and Regional Planning, University of New Orleans (2024) Concentration in Environmental and Hazard Mitigation Planning; Bachelor of Science (2020), University of Illinois at Champaign-Urbana, Urbana, Illinois			
Discipline	Planning and Floodplain Management	Certifications	Certified Floodplain Manager (CFM)	
Contract role(s) / brief description of responsibilities	Floodplain Manager			

Experience dates (2019-Present)	*Experience and qualifications relevant to this project:* Hannah is a Certified Floodplain Manager and Planner at Desire Line. Her prior work experience centered on community-led activism in the water sector where she conducted multiple research projects based on Louisiana water infrastructure, coordinated community events, and supported grant application development. Hannah's experience in critical design, planning, and floodplain management, including her work on the Region 6 Watershed Plan and Coastal Resilience Study, will help her support the creation of the Pluvial Flood Risk Index and planning tool.
2/25–10/25 (*Complete*)	**City of Slidell Repetitive Loss Area Analysis.** Contributed to the site visits and data collection and provided floodplain management expertise.
5/23–5/25 (*Complete*)	**ReCoast, Terrebonne Parish.** Assisted with the submittal of permit applications, assisted with agency responses, and aided in environmental reviews.
10/22–11/23 (*Complete*)	**Tangipahoa Parish, 2045 Comprehensive Plan.** Contributed to plan development and community outreach and engagement efforts.
2020–2022 *Work History*	**The Water Collaborative, Research Coordinator.** Developed proposal to measure the impact of water shutoffs in low-income neighborhoods in relation to COVID-19. Analyzed and created data visualizations via RStudio and ArcGIS related to Louisiana water systems. Performed research on major US cities' Master Plans related to flooding, subsidence, and disaster response in support of the City of New Orleans' updated Urban Water Plan as well as for grant applications. Wrote letters of support for major grant applications and supported with fundraising outreach. Coordinated with venues and partners to set up meetings and events. Created visuals and graphics for events and social media posts.
2019–2020 *Work History*	**Neighborhood Wellness Plan, Urbana, IL / Neighborhood Analyst.** Supported revisions to the existing Neighborhood Wellness Plan, in conjunction with the City of Champaign Planning Department. Analyzed demographic, economic, physical, and social conditions at the neighborhood and local government scale. Developed a community profile, including community characteristics with small area census data. Worked with local administrative data through RStudio.

Firm employed by: **Desire Line LLC**				
Name	**Matthew Wilson**	Years of relevant experience with this employer	<2	
Title	Planner	Years of relevant experience with other employer(s)	2	
Degree(s) / Years / Specialization	Master of Urban and Regional Planning, University of New Orleans (2024) Specialization in Housing & Community Development and GIS Bachelor of Public Administration (2022), University of South Florida, Tampa Florida; Associate of Arts (2020), St. Petersburg College, St. Petersburg, Florida			
Discipline	Planning	Certifications	N/A	
Contract role(s) / brief description of responsibilities	GIS Analyst			

Experience (2012-Present)	*Experience and qualifications relevant to this project:* Mr. Wilson has a land use and GIS background and has specialized expertise in corridor planning in the Jefferson Parish and New Orleans area. His experience creating maps and mapping tools on the Region 6 Watershed Plan, as well as his experience with community outreach and engagement throughout the New Orleans area, will directly support his work as a Planner for the Pluvial Flood Risk Index and creation of the planning tool.
5/24-12/26 (*Ongoing*)	**Louisiana Watershed Initiative, Region 6 Watershed Plan.** Mr. Wilson created map layouts and mapping tools for the Watershed Plan development.
1/25-1/26 (*Complete*)	**City of New Orleans Transient Lodging Study.** Mr. Wilson performed mapping analysis, created comprehensive maps for the Study preliminary report, and developed the Study's Interactive WebMap Tool (online until 1/27).
2/25-10/25 (*Complete*)	**City of Slidell Repetitive Loss Area Analysis.** Mr. Wilson assisted with the site visits, data collection, recommendations and findings for flood mitigation.
10/23–3/25 (*Complete*)	**Lower St. Bernard/Louisiana International Terminal Roadway Network and Resilience Study.** Mr. Wilson assisted with the community outreach and engagement efforts.
2022–2024 *Work History*	**Jefferson Parish Government Graduate Assistant.** Produced zoning and subdivision research and deliverables, coordinated across multiple Parish departments and divisions to conduct land use and area studies, text amendments, technical reports, and products for public education. Conducted community outreach and produced technical analysis for elected leadership.

Firm employed by: **Desire Line LLC**				
Name	**Mary Simmons, MPH**	Years of relevant experience with this employer	<2	
Title	Research Analyst	Years of relevant experience with other employer(s)	2	
Degree(s) / Years / Specialization		Master of Public Health, Tulane University (2025) Bachelors of Biological Sciences, University of New Orleans (2017)		
Discipline	Research Analysis	Certifications	N/A	
Contract role(s) / brief description of responsibilities		Graphics		

Experience (2020-Present)	*Experience and qualifications relevant to this project:* Ms. Simmons is a research analyst, technical writer, and graphic designer for Desire Line. She is proficient in public communication, outreach, and engagement. Ms. Simmons has a Master of Public Health with a concentration in Disaster Management and Environmental Health from Tulane University and worked as a Clinical Research Coordinator at the Tulane Center for Clinical Research for almost 5 years. Her experience with public outreach as well as knowledge of environmental health will help inform the Pluvial Flood Risk Index tool development.
5/24–12/26 (*Ongoing*)	**Louisiana Watershed Initiative, Region 6 Watershed Plan.** Ms. Simmons contributed to the graphic design elements of the Watershed Plan.
10/25–Present	**Bayou Bonfouca Revitalization Plan, City of Slidell.** Ms. Simmons currently contributes to the market and economic analysis, mapping, and resource roadmap, as well as outreach and engagement with the community regarding the Plan.
10/23–3/25 (*Complete*)	**Lower St. Bernard/Louisiana International Terminal Roadway Network and Resilience Study.** Ms. Simmons assisted with the community outreach and engagement efforts.
2020–2025 *Work History*	**Clinical Research Coordinator II, Tulane Center for Clinical Research.** • Proficiency in environmental and human health and safety practices in research lab setting. • Proficiency in human bio sample collection, processing, storage, and shipment protocols in lab and research settings. • Knowledge in Good Clinical Practice, ALCOAC documentation guidelines, and Biomedical Human Research practice. • Excellence in customer service skills with research participants, physicians, research investigators, sponsor representatives, clinical research associates, IRB staff and other research staff. • Acts as lead coordinator or back up coordinator within a clinical research team. • Experience on trials for investigational drugs including COVID and RSV Vaccine Trials, treatments for diabetes, and others. • Experience in research involving active cases of diseases such as COVID, RSV, HSV and more.

Firm employed by: **Desire Line LLC**				
Name	**Eddie Marroquin**	Years of relevant experience with this employer	<1	
Title	Executive Assistant	Years of relevant experience with other employer(s)	30	
Degree(s) / Years / Specialization	English and Political Science, University of New Orleans 1992 - 1994			
Discipline	N/A	Certifications	N/A	
Contract role(s) / brief description of responsibilities			Administrative	

Experience dates 12/95–Present	*Experience and qualifications relevant to this study:* With 30 years of experience in family law, Eddie has a demonstrated steady hand behind the scenes—balancing complex administrative demands while supporting clients through some of the most emotional chapters of their lives. At Desire Line, Eddie works as an Executive Assistant to aid in office and project management, logistics, copy editing, invoicing, and scheduling.
5/24–Present *(Ongoing)*	**Louisiana Watershed Initiative, Region 6 Watershed Plan.** Mr. Marroquin assists with staff time management, provides budget oversight, meeting logistics, and supports client coordination, and project alignment with approved scope of work and services.
1/25–Present *(Completing 1/26)*	**City of New Orleans Transient Lodging Study.** Mr. Marroquin assists with invoice management, provides budget oversight, and project alignment across the team.
5/24–12/25 *(Complete)*	**City of Mandeville, 2045 Comprehensive Plan.** Mr. Marroquin assists with invoice management, provides budget oversight, and project alignment across the team.
1995-2025	**Executive Assistant, Family Law.** Provided executive administrative assistance to family law firm, including file management and organization, copy editing, meeting scheduling and minute taking, client communications and logistics, and overall office organization and functional tasks.

17. Firm Experience:

Project name	**Louisiana Watershed Initiative, Region 6 Watershed Plan**		Firm responsibility (prime or sub?)		Prime
Project number	N/A	Owner's name	South Central Planning and Development Commission		
Project location	Watershed Region 6	Owner's Project Manager	Pat Gordon, Chief Planning Officer		
Owner's address, phone, email	5058 West Main Street, Houma, LA 70360, P: 985-851-2900 X2160, E: pat@scpdc.org				
Services commenced by this firm (mm/yy)	05/24	Total consultant contract cost ($1,000's)			460K
Services completed by this firm (mm/yy)	12/26	Cost of consultant services provided by this firm ($1,000's)			273K

Project Description:

Project includes development of a Regional Watershed Plan for Louisiana Watershed Initiative (LWI) Region 6, including planning, modeling, and development of future flood mitigation projects and policies for 16 coastal and riverine parishes.

The plan is both a land management and funding tool with the following components: (1) comprehensive risk analysis that advances the most impactful projects and avoids shifting flood risk to neighboring communities, (2) regional strategies that leverage planning, zoning, and floodplain policies and standards to effect region-wide benefits over time, and (3) defined role of the Regional Coalition as a project funding advocate at the state and national level, supporting public education and outreach throughout the region, managing regional project selection processes, and maintaining commitment to watershed plan implementation over time. The Plan uses modeling data coupled with an Area of Interest methodology measuring land use, flood risk, population, economic development, and future land use predictions to prioritize and select mitigation projects for the region.

Updates to the AOI *(based on RSC edits)*

GEOGRAPHIC AREA	WHERE PEOPLE SHOULD LIVE?	WHERE PEOPLE SHOULD LIVE?	ECONOMY	% AREA VACANT OR UNDEV	POPULATION DENSITY	POPULATION GROWTH RATE	URGENCY
HUC12 or Forced Drainage Area	**What % of the HUC12 falls into these?** • V zone – 0% = 3 pt, 5% or less = 2 • More than 5% = 1 • 6+ ft. CPRA flood height at year 22? 0% = 4, 30% or less = 2 pts, 5% or less = 3 pt, 30% + = 1	**Level of risk:** • Presence of any area that is NOT SFHA = 1 pts • Presence of any area that is in the Coastal Zone but NOT showing CPRA flood elevation over 4 ft. = 1 pts	**Unemployment in CBG:** • Below 2% = 3 pts • Below 4.5% = 2 pts • Above 4.5% = 1 pt • No score = 0 • Note: State Avg. is 4.3%	**Over 1% of total acreage is undeveloped?** • Yes = 2 • No = 1	**Total population of the CBGs overlapping the HUC-12** • 0 people = Remove • Under 2,000 ppl = 1 pt • 2,001 – 5,000 ppl = 2 pts • 5,001 – 10,000 ppl = 3 pts • 10,001 – 20,000 ppl = 4 pts • 20,001 + ppl = 5 pts	**Growth rate:** • Lower than -0.5 = 1 pt • -0.5 – 0 = 2 pts • 0-0.3 (state avg) = 3 pts • 0.3 – 1 = 4 pts • 1-2 = 5 pts • 2-4 = 6 pts • 4-6 = 7 pts	**Contains a Zip Code with NFIP Premiums Rising by $20 or more?** • 10% + = 5 • 5% - 10% = 4 • 1% - 5% = 3 • 1% + = 2 • 0.5-1% = 1 • Less than 0.5% = 0 **HUC-12 is in benefit area of 1 future project.** • Yes = 1 • No = 2 **HUC-12 is in benefit area of > 1 future project?** • Yes = 0 • No = 1
Score	2 to 7 pts	0 to 2 pts	0 to 3 pts	1 to 2 pts	Removed, 1 to 5 pts	1 to 7 pts	1 to 8 pts

Image *(above):* Transparent AOI Methodology datasets and scoring with input from RSC (highlighted).

Firm's Role: Prime Consultant in partnership with Moffatt & Nichol, Waggoner & Ball, and Meyer Engineers. Desire Line is responsible for plan development, project coordination, policy development, interparish coordination, outreach and engagement, and management of modeling and engineering subcontractors supporting plan development processes and decision-making.

Firm Members involved: Alex Carter, AICP; Jared Carter, Evelyn Campo, CFM; Tara Lambeth, PhD, AICP, CFM; Kara Dudek-Mizel, GIP, AICP; Hannah Rachlis, CFM; Matthew Wilson, Mary Simmons, MPH; Jessi Kenney, PhD, MPH

Project Relevance to the Pluvial Flood Risk Index: Desire Line's experience with Region 6 (including supporting outreach and engagement, coordinating with stakeholders, creating a risk assessment methodology, and using models to communicate flood risk) is applicable to the Pluvial Flood Risk Index planning tool, and will position the Team to meet the RPC's timeline for this project.

Project name	**St. Tammany Parish Coastal Resilience Land Use Study**			Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name		St. Tammany Parish Government	
Project location	St. Tammany Parish, LA	Owner's Project Manager		Ross Liner, Planning & Development Director	
Owner's address, phone, email		21490 Koop Drive, Mandeville, LA 70471, P: 985.898.2529; e: rliner@stpgov.org			
Services commenced by this firm (mm/yy)		01/24	Total consultant contract cost ($1,000's)		155K
Services completed by this firm (mm/yy)		01/25	Cost of consultant services provided by this firm ($1,000's)		155K

Project Description: The Study assessed and recommended mitigation actions in Council Districts 7 and 11, including a background and data assessment, public outreach and engagement, zoning map and code text amendments. The Study effectively advanced the public's understanding of how environmental, development, and infrastructure conditions shape flood risk in the Study Area and created an environment for policy related action. The Team's analysis characterized the range of local conditions, from low-lying coastal wetlands and high groundwater tables to the effects of existing gravity drainage systems, and upland development pressure. The Team evaluated datasets, including elevation, hydrology, repetitive and severe repetitive loss history, roadway networks, and land use / storage capacity to identify areas where current development practices produced a variety of flood types and sources. The Team also assessed regulatory and design constraints, evaluated the performance and limitations of existing stormwater systems, and examined how drainage capacity could be impacted by future growth and development. Recommendations included two parcel-level overlay districts that differentiated medium and high risk areas of future development that would benefit from heightened development standards to better protect existing development from increased future flood risk. This Study provided the Parish with the data, analysis, community input, and subject matter needed to align and take action amongst competing interests in communities facing complex and varied flood risks.

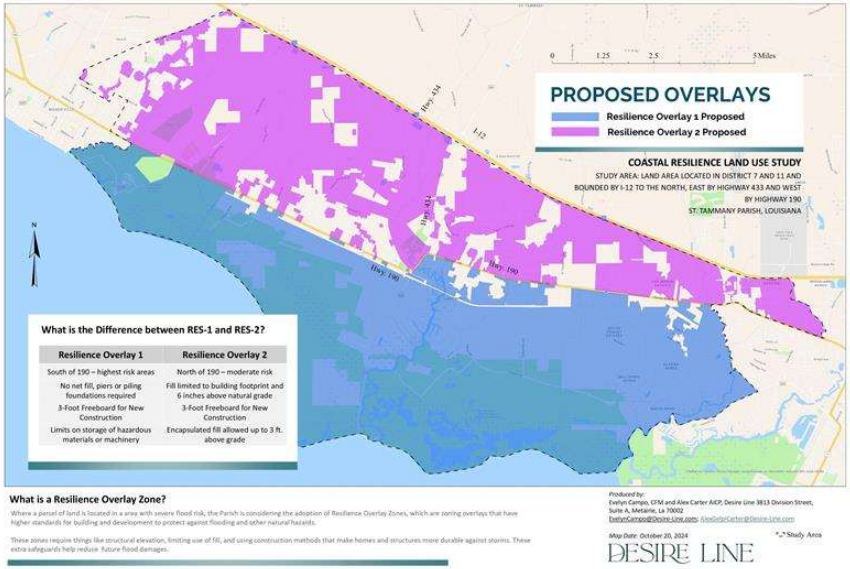


Image *(above):* St. Tammany Parish adopted Resilience Overlays.

Firm's Role: Prime Consultant

Firm Members involved: Alexandra G. Carter, AICP; Jared Carter; Evelyn Campo, CFM; Hannah Rachlis, CFM; Matthew Wilson

Project Relevance to the Pluvial Flood Risk Index: Desire Line's experience analyzing multiple datasets and the impact of risk on land use in St. Tammany Parish will directly inform the needed analysis needed as well as the development of the Pluvial Flood Risk index planning tool.

Project name	**Tangipahoa Parish "Hazards First" Comprehensive Plan 2045**			Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Tangipahoa Parish Government, Planning Department		
Project location	Tangipahoa Parish, LA	Owner's Project Manager	Tracie Schillace, CFM, Planning Director		
Owner's address, phone, email		15475 Club Deluxe Rd, Hammond, LA; P: 985-340-9028, E: tschillace@tangipahoa.org			
Services commenced by this firm (mm/yy)		09/22	Total consultant contract cost ($1,000's)		198K
Services completed by this firm (mm/yy)		09/23	Cost of consultant services provided by this firm ($1,000's)		149K

Project Description: Project included an update to the Parish's 2008 Comprehensive Plan to address new challenges associated with unplanned growth and increased flood risk, including road congestion and public safety. Desire Line was a subcontractor to Villavaso & Associates, and led Plan development processes and deliverable development, including development of the Community Profile, all outreach and engagement activities, Capital Improvement Plan development, and Plan final analysis and recommendations which included a "Hazards First" approach to long-term community growth that reflected transportation network challenges, social vulnerability, and flood risk—where each planning element took accounted for current and future flood risk. The plan was adopted by the Planning Commission in November 2023 and endorsed by the Council in December 2023.

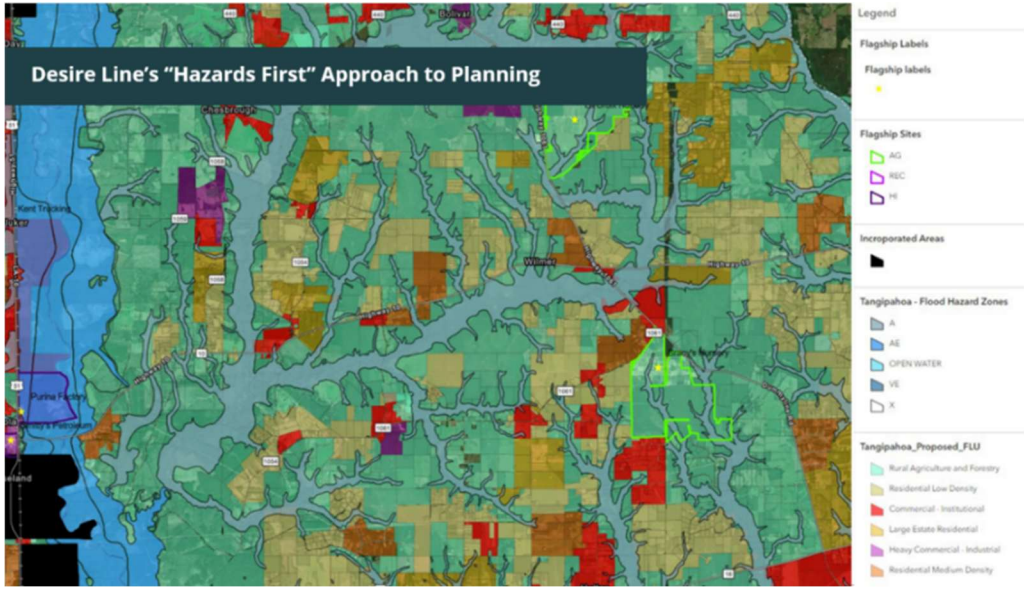


Image *(above):* Tangipahoa Parish Future Land Use Map (adopted in 2023), including SFHAs and proposed future land use categories.

Work included Steering Committee meetings, budget and milestone management, consultant team and client coordination, quality control, site visits, focus groups, public outreach, targeted stakeholder interviews, website development, launch, and online surveying, plan visioning, drafting, review, and finalization, updates to Parishwide existing land use GIS layers, development of new Future Land Use Maps, development of the Capital Improvement Program and scoring methodology, and completion of plan goals, objectives, and implementation tables.

Firm's Role: Sub-Consultant

Firm Members involved: Alex Gelpi Carter, AICP; Evelyn Campo, CFM; Jared Carter; Walter "Eric" Lundin, CFM; Hannah Rachlis, CFM

Project Relevance to the Pluvial Flood Risk Index: Desire Line's "hazards-first" approach to this Comprehensive Plan is in direct alignment with the Pluvial Flood Risk Index tool, as they have similar goals of analyzing vulnerability and flood risk and communicating that information to the public through the development of the final plan document.

Project name	**St. John the Baptists Parish Resilient Housing Study**		Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	St. John the Baptist Parish	
Project location	St. John the Baptist Parish, LA	Owner's Project Manager	Dove Block, Coastal and Water Management Division Lead	
Owner's address, phone, email		1811 W. Airline Highway, LaPlace, LA 70068; P: 985-651-5565; E: d.block@stjohn-la.gov		
Services commenced by this firm (mm/yy)		11/22	Total consultant contract cost ($1,000's)	20K
Services completed by this firm (mm/yy)		08/23	Cost of consultant services provided by this firm ($1,000's)	20K

Project Description:
In coordination with St. John the Baptist Parish, Desire Line completed the development of a Resilient Housing Plan that analyzed the Parish's unique geography, hazard risks, transportation challenges, current and future mitigation projects, housing density, land uses, hazard mitigation plans, and emergency management plans to support long-term land development and improved decision-making to reduce overall hazard exposure and plan for a resilient housing stock, support community resilience among residents, and mobilize resources pre-disaster. The Plan included analysis of new resilient building standards, land use management, measuring and understanding the impacts of levee systems, and a recommended strategy for long-term growth and affordable housing expansion. Recommendations included transportation improvements and mitigation actions that acknowledges widespread social vulnerability and acute poverty as elements of flood risk unique to coastal communities in Louisiana. Plan development also included a flood and wind hazard assessment, building quality and age inventory, analysis of site-built and manufactured housing, geographic analysis of zoning and flood control projects, regular meetings with the Parish, evaluation of draft Plan elements, community meetings, and outreach and engagement with parish stakeholder groups. The Plan received an Excellence Award for a Plan from the Louisiana Chapter of the American Planning Association in 2024.

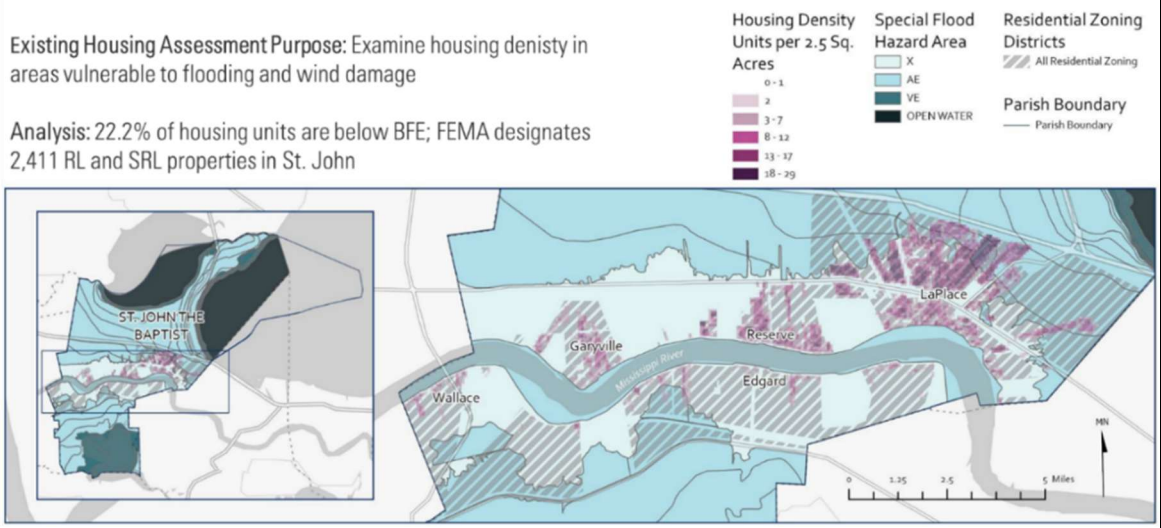


Image *(above):* S. John the Baptist Parish housing density and residential zoning districts mapped in hazardous areas.

Firm's Role: Prime Consultant

Firm Members involved: Alex G. Carter, AICP; Jared Carter; Evelyn Campo, CFM; Hannah Rachlis, CFM and Tara Lambeth, PhD, AICP, CFM (in her role as the former Planning and Zoning Director in St. John the Baptist Parish managing the project for the Parish)

Project Relevance to the Pluvial Flood Risk Index: Desire Line's experience analyzing land use management, housing density, residential zoning districts, hazards, and long-term growth in a leveed community will inform the development of the Pluvial Flood Risk Index.

Project name	**ReCoast Pointe Au Chien / Tulane Glass Half-Full Project**			Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Tulane University, ReCoast, Glass Half Full		
Project location	Terrebonne Parish, LA	Owner's Project Manager	Dr. Julie Albert, Associate Professor, Chemical and Biomolecular Engineering		
Owner address, phone, email		6823 St. Charles Ave., New Orleans, LA 70118 LA; P: 504-862-3260 E: jalbert6@tulane.edu			
Services commenced by this firm (mm/yy)		05/23	Total consultant contract cost ($1,000's)		$84K
Services completed by this firm (mm/yy)		08/25	Cost of consultant services provided by this firm ($1,000's)		$70K *(completed under budget)*

Project Description:
Project included restoration of coastal wetlands in the Bayou Pointe Au Chien and Grand Bayou area of Lafourche and Terrebonne parishes using a mix of glass sand and Bonne Carrie river silt. In partnership with the University, Desire Line produced an Environmental Compliance Plan, applied for required permits, and conducted NEPA compliant outreach and engagement/documentation for the ReCoast Pointe Au Chien / Tulane Glass Half-Full Project to comply with the requirements of the National Environmental Policy Act, Section 106 of the National Historic Preservation Act, State of Louisiana's Coastal Resource Program, and the Clean Water Act. The Plan included consideration of multiple sites, data collection and analysis, development and management of a project website, public communication and documentation, as well as specific guidance and follow-thru on processes needed to meet NEPA requirements. Applications for required permits complied with Section 106 of the National Historic Preservation Act (NHPA) and all were approved consistent with project needs. Desire Line additionally assisted with project scoping, professor and engineering follow-up, and federal agency correspondence to ensure project progress and completion.3

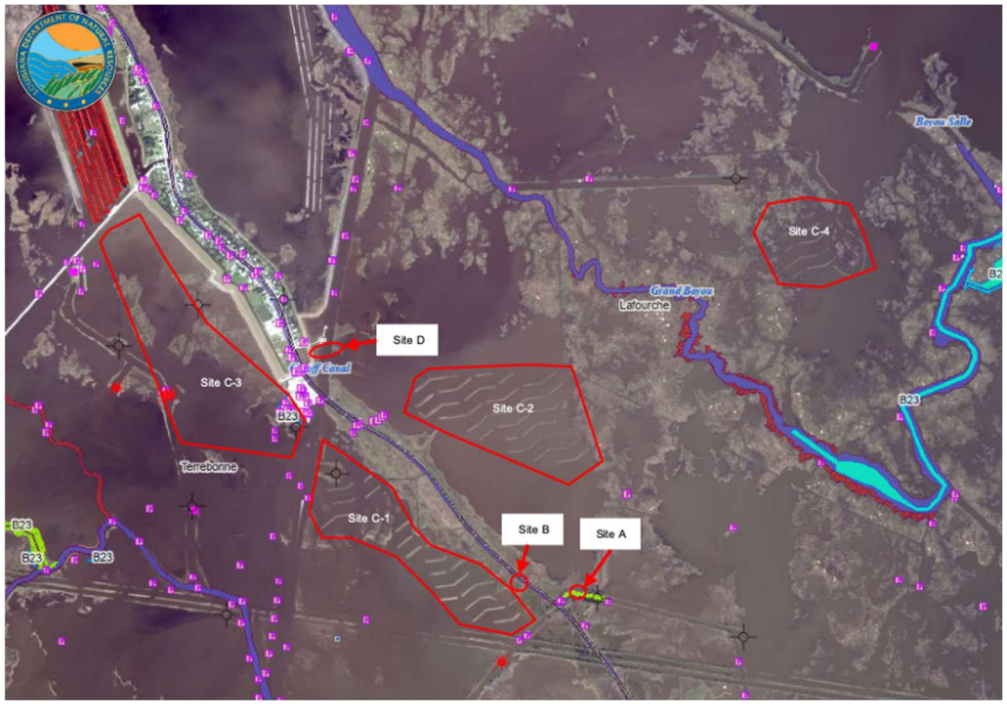


Image *(above):* Terrebonne Parish coastal restoration sites A, B C, and D.

Firm's Role: Prime for Environmental Support Services for a National Science Foundation Grant to Tulane University / ReCoast

Firm Members involved: Alex G. Carter, AICP; Jared Carter; Evelyn Campo, CFM, Walter "Eric" Lundin, CFM; Hannah Rachlis, CFM

Project Relevance to the Pluvial Flood Risk Index: Desire Line's work on environmental compliance, public outreach and engagement, local permitting and correspondence with relevant federal permitting agencies will align efforts to develop the Pluvial Flood Risk Index in accordance with national, state, and local datasets and regulations.

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
Slidell EPA Grant	Terracon	$31,906.25	4 months
Code Writing and Implementation	City of Slidell	$82.603.75	5 months
LWI Region 6 Watershed Plan	South Central Planning & Development Commission	$62,610.00	3 months
Aquatics Center Fundraising	Jefferson Community Foundation	$47,743.25	5 months
As needed, Aquatics Center Grant Writing	Linfield Hunter & Junius	$24,613.06	24 months
Code Writing Services	City of Covington	$175,028.75	24 months
As needed, Supplemental Planning Services	City of Covington	$18,958.75	12 months
Code Amendments	City of Carencro	$81,863.19	24 months
Limited DRA Grant Reporting	City of Kenner	$4,296.25	5 months
Permit Tool, As needed Software Support	Terrebonne Parish	$22,000.00	24 months
As needed, CRS & NFIP Support	Terrebonne Parish	$9,576.25	12 months
Master Plan Implementation / Parishwide Comprehensive Zoning	Tangipahoa Parish Government	$205,178.75	24 months
TO2.2 – DRA Grant Application & Submittal	City Park Conservancy	$15,218.75	12 months
TO2.3 – LWCF Grant Application & Submittal	City Park Conservancy	$16,238.75	12 months
St. James Parish RCIP Grant Management	St. James Parish Government	$101,908.87	8 months
St. James Parish Comprehensive Planning	St. James Parish Government	$63,011.95	12 months
Bayou Liberty / Coastal Resilience Study	St. Tammany Parish	$12,053.75	4 months
EDA Build Back Better Grant Management	University of New Orleans	$76,2000.00	9 months
UNO Sandbox LED Grant Management	University of New Orleans	$75,000.00	12 months
Master Plan Update	Plaquemines Parish Government	$200,000.00	18 months
Comprehensive Land Use Code Update	City of Mandeville	$250,000.00	24 months

19. Staffing Capacity:

Referencing Section 17 where appropriate (i.e., where key personnel would be working on multiple projects simultaneously) describe how your firm will ensure that sufficient staffing and capacity will be made available for the conduct of this project.

The Desire Line Team has the capability and capacity to efficiently complete all tasks associated with developing a Pluvial Flood Risk Index planning and modeling tool to a high standard while acknowledging community-specific context. With staff residing within a 5 minute drive of the RPC, and the primary office only 10 minutes away, we are well positioned to be present at the RPC and across the region and offer a deep bench of experienced, local Planners and subject matter experts to support this project.

Since Desire Line was founded in 2021, we have entered into more than 70 contracts with private, nonprofit, and governmental entities to support and enhance community development outcomes, planning and floodplain management services, and implement more effective land management strategies regionwide. We have taken care to foster a competent and dynamic team with the ability to expand or constrict work to meet the client needs at a moment's notice. We also take a measured, planned approach when pursuing new projects to ensure that the Team workload is manageable, aligns with City staff workflows, and maintains a high level of service to existing clients.

Many of the Company's projects are in a steady rhythm (having been kicked off in early 2025), and many have been recently completed in late 2025 and early 2026 (New Orleans Transient Lodging Study, Slidell RLAAs, Mandeville Comprehensive Plan, Town of Abita Comprehensive Rezoning, and more), wherein we currently have 58% capacity retained for new work in 2026. With 58% of our time available, Desire Line's experienced planners, floodplain managers, GIS analysts, and emergency responders, and public health specialists have both the time and resources to devote to this project and engage the RPC and regional stakeholders to best ensure planning and project management services exceed expectations. Having worked alongside the local governmental staff, RPC staff, elected officials, and community members across the Region to advance more resilience planning outcomes, the Desire Line Team retains important community context and relationships to shift directly into this RPC work upon contract notification and award.

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
Moffatt & Nichol Inc.	301 Main Street, Ste 800 Baton Rouge, LA 70801	LeeAnn Fitch lfitch@moffattnichol.com	225-336-2075

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	LWICB
3. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	DESIRE LINE LLC
4. Prime consultant? (Y/N)	N
5. Consultant mailing address	301 Main Street, Ste. 800, Baton Rouge, LA 70801
6. Consultant physical address (existing or to be established, if location is used as an evaluation criteria)	301 Main Street Ste. 800, Baton Rouge, LA 70801
7. Name, title, phone number, and email address of consultant's contract point of contact	LeeAnn Fitch P : 225.336.2075 Water Resource Engineer E : lfitch@moffattnichol.com

8. Name, title, phone number, and email address of the official with signing authority for this proposal	Jonathan Hird Vice President | Principal P : 225.336.2075 E : jhird@moffattnichol.com
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	Signature (shall be the same person as ~~#9~~ 8): Jonathan Hird _____

terminate any contract awarded based on such a false response.		
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): N/A %: N/A	Firm(s)' N/A

Firm employed by	moffatt & nichol		
Name	**LEEANN R. FITCH, PE, CFM**	Years of relevant experience with this employer	2
Title	WATER RESOURCES ENGINEER	Years of relevant experience with other employer(s)	8
Degree(s) / Years / Specialization		MS / 2016 / Coastal and Ecological Engineering	
		BS / 2014 /Environmental Engineering	
Discipline	Civil Engineering	Certifications	Professional Engineer : LA, 44323 | MS, 35231 | AL PE55345 | FL, PE101851 | VA, PE0402070532
Contract role(s) / brief description of responsibilities			LeeAnn will lead water resources engineering and hydrologic and hydraulic modeling, informing flood risk evaluation and resilient infrastructure design.

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to this study: **Areas of Expertise** • Program + Project Management • Geographic Analysis + Statistics • Stormwater Design • Watershed Modeling + Mapping • Hydrologic Restoration • Grant Management + Support
2024 - PRESENT	***Louisiana Watershed Initiative Region 6 Watershed Plan*** Water resources engineer steering the use of models and regional data to inform decision-making; support evaluation of mitigation actions, support development of near, mid, and long-range goals for the region; and support plan development, project scoping, regional adaptation strategy development, and strategic (and focused) community outreach activities.
2024 - PRESENT	***Advancing Resilience in Communities (ARC) FEMA Production and Technical Services (PTS) Contractor*** Serving as Project Manager for ARC FY23 Task Order, performing large-scale 2D BLE Option C analyses for select streams in Puerto Rico. Also served as Senior Technical Reviewer for Base Level Engineering Analysis and Mapping model development for Herkimer region.
2024 - PRESENT	***ment, New Orleans, LA*** As water resources associate, assisted in evaluating proposed stormwater storage retrofit into the existing basement footprint of the proposed site utilizing the existing city-wide PCSWMM model for New Orleans. Additional tasks included a technical memo for the hydrologic and hydraulic modeling and a benefit-cost analysis for the proposed storage.
2024	***Louisiana Watershed Initiative (LWI) Program Management, Statewide, LA*** Project manager who provided support for the Louisiana Watershed Initiative (LWI) Program Management administered by the Office of Community Development (OCD) Disaster Recovery Unit, to provide funding, data, and resources to reduce flood risks throughout the state through a watershed-based approach. Responsibilities included assisting OCD in developing an implementation strategy to accelerate the completion of approximately 130 projects funded through the LWI programs

2017-2020	*Drainage and Coastal Protection Plan, St. Tammany Parish, LA* Project engineer for St. Tammany Parish's drainage and coastal protection plan through modeling assessments, project identifications, and funding sources through state and federal programs such as Hazard Mitigation Grant Program and Louisiana Watershed Initiative.
2017-2024	*W-14 Improvements and Fritchie Marsh Hydraulic Restoration, St. Tammany Parish, LA* Hydrologic and Hydraulic (H&H) engineer on the project aimed to reduce flood risks within the W-14 Canal Basin and the degradation of Fritchie Marsh. Concepts included widening of the W-14 Canal, regional detention, and features to convey additional freshwater through Fritchie Marsh. HEC-HMS/HEC-RAS models used for flood analysis and MIKE21 model used to assess alternative improvements throughout Fritchie Marsh. Completed benefit cost analysis to secure HMGP funding.
2022-2023	*Southwest Ponchatoula Drainage Study, Tangipahoa Parish, LA* Water resources lead responsible for the evaluation of regional drainage conditions in the southwest region of Ponchatoula, LA. A 1D/2D model was developed based on topographic surveys and site visits. Flood prone areas were identified along with alternative flood risk improvements suggested for design.
2022-2024	*St. Charles Sustainable Fuels, St. Charles Parish, LA* Water resources engineer directed and managed hydrologic and hydraulic model development, including survey coordination, 230-acre site grading, and HMIA permit submittal. For this project, a 2D HEC-RAS rain-on-grid model was developed and utilized for these efforts.
2017-2018	*Laplace PUD Comprehensive Drainage Evaluation, St. John the Baptist Parish, LA* Water resources engineer who provided drainage assessments for the Belle Terre Land encompassing over 3,000 acres which included review and coordination of the following: West Shore Lake Pontchartrain HSDRRS Feasibility Study, St. John the Baptist Parish Clearing and Snagging, St. John the Baptist Maintenance Dredging, and Shell pipeline projects and existing infrastructure.
2017-2019	*Lake Borgne Marsh Creation - Increment 1 (PO-0180), St. Bernard Parish, LA* Project engineer who assisted with the engineering and design of this project, a large-scale marsh creation project that is anticipated to create approximately 2,769 acres of marsh. When completed, the project will represent one of the largest marsh creation projects to be implemented by CPRA to date.

Firm employed by	moffatt & nichol		
Name	**ANDY STERNAD, AIA, AICP, LEED AP**	Years of relevant experience with this employer	15
Title	SR. TECHNICAL ADVISOR & PLANNER	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		M. Arch / 2006 / Architecture	
		BA / 2009 / Architecture	
Discipline	Architecture	Certifications	Registered Architect : LA, 10110 | FL, AR101610 | CT, ARI0015601 | SC, 10797
Contract role(s) / brief description of responsibilities			Utilizing his in-depth local experience in the region, Andy will advise on data & data architecture, while providing quality control, quality assurance, and data validation.

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to this study: **Key Features** • Architecture • Urban design • Green infrastructure • Landscape • Stormwater design • Historic & cultural preservation
2019	***Louisiana Water Planning Projects, State of Louisiana, Six coastal parishes and Gretna, LA.*** Helped lead a multi-disciplinary team in resilience planning, community engagement, and long-term visioning for six parishes plus conceptual design of multiple pilot projects for NDR-funded Louisiana's strategic adaptations for future environments (LA SAFE) strategy, a 50-year vision for resilient urban development corresponding to the state's coastal master plan.
2024 - PRESENT	***Louisiana Watershed Initiative Region 6 Watershed Plan, Region 6, LA.*** As lead planner, Andy supports watershed planning and regional adaptation strategy development, translating technical analyses into clear goals, actionable mitigation strategies, and community-informed planning recommendations.
2010-2013	***Greater New Orleans Urban Water Plan & Project Implementation, GNO, Inc. & City of New Orleans, New Orleans, LA.*** After co-organizing the firm's final Dutch Dialogues New Orleans design charrette (2010), organized 22 national and international firms, co-authored the vision, urban design, and implementation documents, and coordinated two dozen reports for the Greater New Orleans Urban Water Plan (2013), awarded the APA National Planning Excellence Award for environmental planning. Currently helps lead overall district planning for the Gentilly Resilience District (2018-ongoing), the first implemented program of the water plan, working with the city to guide the development and integration of concurrent projects with a total $141 million construction value.
2019 - ONGOING	***Charleston Water Planning Projects, City of Charleston & the Historic Charleston Foundation, Charleston, SC.*** Led a series of collaborative design workshops and stakeholder engagements, and co-authored the final report and presentation to the city. Led the city plan 2020 land & water analysis to develop the underlying data and planning recommendations for the city's comprehensive plan update. Then led perimeter protection analysis of the USACE coastal risk management plan to encircle the historic peninsula with a storm surge flood barrier to help the city integrate stormwater management, green infrastructure, and historic and cultural preservation. Currently preparing to lead a 10+ firm team to develop the Charleston water plan, an effort to shape design and decision-making for the city's future climate-resilient infrastructure.

Firm employed by moffatt & nichol			
Name	**TIMOTHY NELSON, PG, CFM**	Years of relevant experience with this employer	3
Title	COASTAL SCIENTIST	Years of relevant experience with other employer(s)	4

Degree(s) / Years / Specialization	MS / 2017 / Earth and Environmental Sciences
	BS / 2013 / Geological Sciences
Discipline: Geoscientist — Certifications	Professional Geoscientist: LA, 1395
Contract role(s) / brief description of responsibilities	Tim will support planning and design through coastal science analysis that clarifies risk, ecology, and shoreline behavior.

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to this study: **Software/Program/Code Familiarity**
	• Delft3D, MIKE, SWAN • Python, Matlab, VBA • FMA, HMGP, CDBG, RESTORE • WHAFIS, Xbeach • Postgres, ArcGIS • GOMESA, SRLF
2022 - PRESENT	***FEMA Regions 1 & 2 Production and Technical Services Support.*** Supporting production and technical services for modeling, outreach, and risk mapping for FEMA Regions 1 and 2. Efforts include geospatial automation, data management, field reconnaissance, wave and runup assessment, model development, annualized loss assessment, and erosion assessment.
2022 - PRESENT	***2029 Louisiana Master Plan for a Sustainable Coast: ICM Improvements and Increased Efficiency.*** Subject Matter Expert (SME) and facilitator for a two-and-a-half-day workshop to provide local Mayors and Parish presidents, from communities impacted by Hurricanes Laura and Delta, a better understanding of the role of planning, design, and hazard mitigation in improving community resilience. Served as SME to provide inter-disciplinary expertise in the integration of community planning, placemaking, Complete Streets, stormwater management, resilience, and phased implementation in the face of climate change.
2018 - 2022	***2023 Louisiana Master Plan: Data Support Team, LA.*** Supported the development of a Python powered PostgreSQL database for cost estimates and preliminary design of several hundred coastal restoration and protection projects to facilitate numeric modeling and prioritization analysis. The program offers guidance for directing $50 billion towards the construction of coastal protection and restoration projects to reduce coastal flood risk, promote sustainable ecosystems, strengthen communities, and support vital coastal industry. Efforts included Python coding, database development, GIS automation, cost estimation, planning-level design, data and document production automation, and interdisciplinary team coordination
2022- PRESENT	***Program Management for the Louisiana Watershed Initiative, LA.*** Environmental scientist supporting program management for the Louisiana Watershed Initiative. The program was created following historic flooding in 2016 as a program to coordinate funding, data, and resources across state agencies as a state-wide in an effort to address flood risk and implement mitigation measures on a watershed scale. Efforts included facilitation of coordination between regional and state stakeholders, preparation of program guidance recommendations, and development of tools and resources for public outreach

Firm employed by	moffatt & nichol		
Name	**LEX AGNEW**	Years of relevant experience with this employer	8
Title	GIS ANALYST	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		MLA / 2017 / Landscape Architecture BS / 2015 / Architecture	
Discipline	N/A	Certifications	N/A
Contract role(s) / brief description of responsibilities		Lex will focus on GIS analysis and mapping that translate complex environmental and infrastructure data into clear, actionable insights.	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to this study: **Key Features** • Landscape analysis • Flooding studies • Accessibility • Mapping • Heat mitigation • Socio-economics
2024 - PRESENT	***Louisiana Watershed Initiative Region 6 Watershed Plan, Region 6, LA.*** As GIS Analyst, Lex leads spatial analysis and mapping, synthesizing regional datasets and model outputs to support decision-making, mitigation evaluation, and visualization of near-, mid-, and long-term watershed strategies.
2023	***Stormwater Opportunities: Spirit Of Charity, Lafitte Greenway, Armstrong Park, New Orleans, LA & Downtown Development District Stormwater Management, New Orleans, LA.*** Lex worked with stormwater modelers to design and test green infrastructure in the Central Business District and the Lafitte Neighborhoods in New Orleans. Using SWMM and GIS the flood reduction impact of different design scenarios was visualized and used to refine designs in an iterative process. The visualizations and quantifications of flood reduction impacts helped the projects get a rough estimate of their cost-benefit ratio and apply for grant funding.
2024	***Tulane University Stormwater Master Plan, New Orleans, LA.*** Lex analyzed stormwater modeling data to help quantify and visualize the impact of potential green infrastructure across Tulane's campus. The analysis helped determine how much flooding could be reduced through drainage and stormwater improvements and which buildings would require dry flood-proofing solutions.
2018-2021	***New Orleans NDR: Gentilly Resilience District, New Orleans, LA.*** Landscape designer. Lex led the mapping and analysis for the district through a variety of lenses, from flood risk to urban heat island effect and neighborhood walking sheds. A major part of this analysis used the stormwater modeling software SWMM to evaluate different design scenarios, and conditions in Gentilly. This helped the design team and the client measure the beneficial impact of the pilot projects being implemented by the Resiliency District and compare the results to other hypothetical scenarios like "what if the City doubled it's pumping capacity?" or "what in Gentilly was re-forested?"

2019-2020	***Living With Water Houston, Houston, TX.*** Landscape designer. Lex led the initial mapping efforts that were foundational to a series of colloquia and workshops led by Waggonner & Ball along with Dutch experts, local Government staff, and stakeholders. The Living with Water workshops proposed resilient projects for three study areas affected by Hurricane Harvey. Additionally, Lex helped craft and edit the planning document that served as the final deliverable for the client.
2019	***Dutch Dialogues Charleston, Charleston, SC.*** Lex led the initial mapping efforts that were foundational to a series of colloquia and workshops led by Waggonner & Ball along with Dutch experts, city staff, and local stakeholders and experts. Lex helped lead the West Ashley workshops, a flood prone suburban area in Charleston. Additionally, Lex helped craft and edit the planning document that served as the final deliverable for the client. The Dutch Dialogues efforts in Charleston led to several additional projects in Charleston including the *City Plan 2030 Land & Water Analysis and The Charleston Integrated Water Plan*.
2020-2021	***City Plan 2030 Land & Water Analysis, Charleston, SC.*** Lex led this mapping and analysis project, that helped inform the Charleston City Plan, and the potential for elevation based zoning in the City of Charleston. The Land and Water Analysis looked at land surface elevation, watershed typology, and environmental sensitivity to determine "What is your risk?", "How does your runoff impact your surroundings?" and "What other ecological considerations need to take place?"
2022	***Resilient Ready Tampa Bay, Tampa, FL.*** Landscape Designer. Lex led the initial mapping efforts that informed the study area selection and subsequent design workshops in three prototypical communities in the Tampa Bay region: an inland closed basin, a barrier island community, and a bay front town. Lex helped lead a two-week intensive design workshop with Dutch designers, city staff, and local stakeholders and experts. Afterwards Lex helped craft and edit the final planning document.
2023 - PRESENT	***St. Paul's Blue/Greenway, Norfolk, VA.*** Landscape designer. Lex helped design the early conceptual phase of this 27 acre project, transforming it from a series of detention ponds into a stormwater park with recreational and ecological functions. Additionally Lex helped create graphics and communications materials for the project including a story map.
2022-PRESENT	***Resilient Hampton, Hampton, VA.*** Landscape designer. Lex has helped lead several resiliency efforts in the city of Hampton including: A pilot project plan in the Newmarket Creek Watershed and similar ongoing planning efforts in Downtown Hampton and the coastal communities of Phoebus and Buckroe. These planning projects involved flood risk mapping, design workshops, and the development of prototypical pilot projects that are currently being implemented throughout the city including: a linear stormwater park drainage ditch retrofit, a road raising, and detention pond to stormwater park retrofit.

Firm employed by	moffatt & nichol		
Name	**GABRIELLE SIMON, PE**	Years of relevant experience with this employer	1
Title	WATER RESOURCES ASSOCIATE	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		BS / 2021 / Environmental Engineering	
Discipline	Environmental	Certifications	Engineer-In-Training : LA, 0051072
Contract role(s) / brief description of responsibilities		Gabrielle can design stormwater management systems and flood mitigation measures, and analyze impacts of proposed developments on existing drainage.	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to this study: **Key Features**
2024 - PRESENT	*Louisiana Watershed Initiative Region 6 Watershed Plan, Region 6, LA.* As a modeler, Gabrielle contributes technical modeling and data analysis, supporting scenario testing, mitigation evaluation, and the development of data-driven regional planning recommendations.
2024 - 2025	*Advancing Resilience in Communities (ARC) FEMA Production and Technical Services (PTS) Contractor* River modelling in HEC-RAS 2D for a collaborative project to create FEMA flood maps for Herkimer County, NY and the Commonwealth of Puerto Rico. Responsibilities include significant GIS work and HEC-RAS Modelling. FEMA is conducting a Flood Ricks Project for portion of Herkimer County and the Mohawk River Corridor and verified streams across the island of Puerto Rico. The scope of this project includes base level engineering and digital floodplain mapping as well as issuance of a new Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM). This updated flood hazards information can be used for expanding local flood risk awareness, enhancing emergency management services, FEMA regulatory submittal, and hazard mitigation planning.
2023	*Bayou Boyle Regional Detention Pond, Pontchartrain Levee District, Gonzales, LA.* As hydrologic and hydraulic (H&H) design specialist, provided grant application support, including H&H analyses and design services for the Bayou Boyle Detention project for the Louisiana Department of Transportation and Development's statewide flood control program.
2022-2024	*Louisiana (LA) Highway 22 Gapping Project, Pontchartrain Levee District, LA.* As hydrologic and hydraulic design specialist, assisted in assessing proposed excavations and bridge spans at LA Highway 22 in a one-dimensional/ two-dimensional regional hydraulic model to reduce flood risk north of the highway and introduce fresh water to the McElroy swamp. Additionally, assisted in reporting results, post-processing, and preparing support documentation for Ascension, Livingston, and St. James Parishes.

- Stormwater management systems
- Development impact on existing drainage
- Large-scale flood studies
- Flood mitigation measures
- Hydraulic data
- Grant procurement

2025	*Mercy Hospital Development, New Orleans, LA.* As water resources associate, assisted in evaluating the proposed stormwater storage retrofit into the existing basement footprint of the proposed site utilizing the existing citywide PCSWMM model for Mercy Partners, LLC. Additional tasks included a technical memo for the hydrologic and hydraulic modeling and a benefit-cost analysis for the proposed storage.
2019	*Louisiana Watershed Initiative Region 6 Watershed Plan, Region 6, LA.* As part of an engineering/environmental consulting team, serves as water resources associate supporting the evaluation of mitigation actions; supporting development of the region's near-, mid-, and long-range goals; and supporting plan development, project scoping, regional adaptation strategy development, and strategic (and focused) community outreach activities for the South Central Planning & Development Commission.
2024	*Chennault International Airport Drainage Study, Lake Charles, LA.* As hydrologic and hydraulic design specialist, assisted in model development of the existing conditions site utilizing a regional model of the Kayouchee Coulee. Tasks included survey data input and existing site inundation evaluation prior to evaluating the proposed airport facility extension.
2023 - 2024	*Williams South Permittee Responsible Mitigation, Tangipahoa, LA.* As hydrologic and hydraulic design specialist, developed a hydrodynamic model to evaluate restored conditions for proposed mitigation. Tasks included complex modeling solutions to provide and maintain ecological benefits across the site.
2023 - 2024	*St. Charles Clean Fuels Facility, St. Charles Parish, LA.* As hydrologic and hydraulic (H&H) design specialist, developed H&H modeling of a proposed clean fuel facility in St. Charles Parish. Tasks included assessing existing on-site storage as the site is located north of an existing facility and the development of proposed conditions utilizing HEC-RAS. Tasks included resizing current on-site culverts, utilizing and resizing pump systems, and sizing detention ponds.
2022 - 2024	*Bayou Manchac Regional Flood Risk Reduction Study, Pontchartrain Levee District, LA.* As hydrologic and hydraulic design specialist for the evaluation of flood risk reduction projects throughout the Bayou Manchac Basin, utilized the one-dimensional/two-dimensional regional Amite River Basin Numerical Model in HEC-RAS to evaluate the Manchac Watershed existing conditions and proposed alternatives along Bayou Manchac, including channel clearing and snagging, dredging and upsizing of culverts, channel realignment, and regional detention opportunities. Along with modeling, assisted in conducting a benefit-cost analysis and developing a technical report, as well as providing grant support for funding opportunities through the Federal Emergency Management Agency and Louisiana DOTD.

Firm employed by	moffatt & nichol		
Name	**NICHOLAS SCALFANO, PE**	Years of relevant experience with this employer	1
Title	WATER RESOURCES ENGINEER	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		BS / 2020 / Civil Engineering, University of Louisiana	
Discipline	Civil Engineering	Certifications	Professional Engineer: LA, PE.0049292
Contract role(s) / brief description of responsibilities		Nichols will support planning and design through H&H modeling that clarifies water behavior and informs resilient infrastructure solutions.	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to this study: **Software/Program/Code Familiarity** • HEC-RAS 1D/2D • Procore Construction Software • AutoDesk Storm Analysis • HEC-HMS • EPA SWMM • AutoCAD/Civil 3D
2024 - PRESENT	***Louisiana Watershed Initiative Region 6 Watershed Plan, Region 6, LA.*** As a modeler, Nick supports hydrologic and hydraulic modeling, applying regional data to evaluate flood mitigation actions and inform watershed-scale planning and adaptation strategies.
2022-2024	***Louisiana Watershed Initiative, Upper Calcasieu River, LA.*** As engineering intern for Region 4 and Calcasieu Parish Regional Watershed Planning, created existing 1D/2D H&H models for the upper Calcasieu River in HEC-RAS and HEC-HMS and conducted extensive research on the area's soil conditions, land development, and meteorological patterns.
2020-2021	***St. Charles Parish Master Drainage Plan, St. Charles Parish, LA*** As engineering intern developed existing and consequence 2D H&H models for the areas of Montz, Ormond, New Sarpy, and Norco to create master drainage plans for the Parish and presented the models to residents on the Parish's behalf at public meetings.
2018-2019	***Water System Digitalization, Alexandria, LA.*** As engineering intern, digitized physical plans of the entire drinking water system, including pipe types/sizes, reservoirs, pumps, and water towers, of the City of Alexandria, using Civil3D and Bentley's WaterCAD and calibrated using typical water pressures along different pipes in Alexandria.

Firm employed by	moffatt & nichol		
Name	**JULIA C. MUDD**	Years of relevant experience with this employer	2
Title	COASTAL/WATER RESOURCES ASSOCIATE	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization		MS / 2023 / Civil Engineering-Water Resources	
		BS / 2017 / Environmental Science	
Discipline	Civil Engineering	Certifications	N/A
Contract role(s) / brief description of responsibilities		Julia will bring her experience and expertise in stormwater and green infrastructure modeling and physical modeling of open channel flow to this project.	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to this study: **Key Features**
	• Hydraulic & Hydrologic modeling • ArcGIS • Coastal and urban stormwater modeling • Physical Modeling • Spatial Analysis • Compound flooding
2024 - PRESENT	***Louisiana Watershed Initiative Region 6 Watershed Plan, Region 6, LA.*** As a modeler, Julia supports hydrologic modeling and data synthesis, helping assess flood risk, compare mitigation alternatives, and inform phased watershed planning goals.
2024 - 2025	***Advancing Resilience in Communities (ARC) FEMA Production and Technical Services (PTS) Contractor*** River modelling in HEC-RAS 2D for a collaborative project to create FEMA flood maps for Herkimer County, NY and the Commonwealth of Puerto Rico. Responsibilities include significant GIS work and HEC-RAS Modelling. FEMA is conducting a Flood Ricks Project for portion of Herkimer County and the Mohawk River Corridor and verified streams across the island of Puerto Rico. The scope of this project includes base level engineering and digital floodplain mapping as well as issuance of a new Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM). This updated flood hazards information can be used for expanding local flood risk awareness, enhancing emergency management services, FEMA regulatory submittal, and hazard mitigation planning.
2024 - 2025	***FEMA Herkimer Modeling, NY.*** River modeling in HEC-RAS 2D for a collaborative project to create FEMA flood maps for Herkimer County, NY. Responsibilities included significant GIS work and HEC-RAS modeling. FEMA is conducting a Flood Risk Project for portions of Herkimer County and the Mohawk River Corridor. The scope of this project includes base level engineering and digital floodplain mapping as well as issuance of a new Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM). This updated flood hazard information can be used for expanding local flood risk awareness, enhancing emergency management services, FEMA regulatory submittals, and hazard mitigation planning.
2024 - PRESENT	***Lafitte Greenway BRIC Grant, New Orleans, LA.*** Stormwater modeler (PCSWMM) to test stormwater storage potential along the Lafitte Greenway linear park in New Orleans and calculate reductions in neighborhood flooding due to new storages. New storages and routing were added to an existing SWMM model of the city of New Orleans created by CDM Smith and maintained by Ardurra.

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 moffatt & nichol				
Name	**JONATHAN HIRD,PE, CENG, FICE**		Years of relevant experience with this employer	19
Title	VICE PRESIDENT, PRINCIPAL		Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization			MS/ 2001 / Civil and Environmental Engineering	
			BS / 1993 / Environmental Science	
Discipline	Civil Engineering	Certifications	Professional Engineer : LA, PE0032299	
Contract role(s) / brief description of responsibilities			Jonathan will advise on complex coastal and water infrastructure challenges, ensuring engineering decisions align with long-term resilience, constructability, and performance goals.	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to this study: **Areas of Expertise** • Coastal Engineering • Resilience Planning & Adaptation • Port Master Plans and Market Analyses • Stormwater Management • Waterfront Planning • Ecosystem Restoration
2024 - PRESENT	***Louisiana Watershed Initiative Region 6 Watershed Plan*** Principal-in-Charge providing senior technical oversight for the development of modeling framework, project plan development and coordination with project team, project partners, stakeholders, and Program Management team. The modeling approach included development of a 2D rain-on-mesh HEC-RAS model for two HUC10 watersheds within HUC8 watershed HUC08090301 (Upper Barataria Basin). This effort includes stakeholder outreach, hydrologic and hydraulic (H&H) analysis, and quality control. The H&H analysis involves eight calibration events, five rainfall recurrence interval event profiles and combining Moffatt & Nichol's two HUC10 watersheds with the down gradient HUC10
2021-2022	***Louisiana Watershed Initiative DOTD Modeling Region 6 (HUC208)*** Principal-in-Charge for the HEC-RAS hydraulic and hydrologic model development of the LWI-R6 ECLC HUC8 08090301, of the Lower Mississippi (HUC2 08), which includes sub-basins associated with the LWI-R6 (08070300 - Lower Grand, 08090203 - Eastern Louisiana Coastal, 08090301 - East Central Louisiana Coastal, 08090302 - West Central Louisiana Coastal). Provided Senior Technical lead for the development of the 2D HEC-RAS model version 6.3.1 and consisted of both coastal and transition zones and is influenced by tidal conditions, storm surge, wind, and fluvial and pluvial flooding.

2023-2025	***Bucktown Harbor Marina Market Analysis, Jefferson Parish, LA*** Principal-in-Charge for this analysis of innovative financing and alternative project delivery methods to expedite and increase the efficacy and cost-effective of coastal flood risk reduction projects included in the State of Louisiana's Comprehensive Master Plan for a Sustainable Coast. Provided implementation guidance for project types on the suitability of potential application for alternative delivery and alternative financing scenarios for several Coastal Master Plan projects.
2023 - PRESENT	***Tangipahoa Parish Stormwater Master Plan, Tangipahoa Parish, LA.*** Principal-in-Charge for the development of a parish-wide stormwater Master Plan. Provided technical lead in the analytical approach of currently available data used to identify and prioritize stormwater management strategies, projects, and Best Management Practices at the regional, watershed, basin, and sub-basin level for flood risk reduction. Order of magnitude cost-benefit analyses were developed to identify and lead to expedited construction of "no-risk" projects for the first phase of implementation.
2024	***Point Coupee Parish Smart Growth Comprehensive Plan, LA*** Hydraulic engineer responsible for the incorporation of surface water, stormwater, groundwater, water supply and wastewater management guiding principles into the parish wide Comprehensive Plan, that also must reflect stakeholder input citizen's core values. The Guiding Principles are established through citizen and stakeholder input. They are grouped in four broad topic areas: Livable Community; Prosperous Economy; Healthy Environment and Opportunity and Equity.
2022	***West Feliciana Parish Smart Growth Comprehensive Plan, LA.*** Hydraulic engineer responsible for the incorporation of surface water, stormwater, groundwater, water supply and wastewater management guiding principles into the parish wide Comprehensive Plan, that also must reflect stakeholder input citizen's core values. The Guiding Principles were developed to ensure that planning recommendations and strategies reflect and support parish citizens' core values. They are grouped in four broad topic areas: Livable Community; Prosperous Economy; Healthy Environment and Opportunity and Equity
2023	***Louisiana Community Resilience Institute Mayors' Workshop, Baton Rouge, LA*** Louisiana Community Resilience Institute Mayors' Workshop, Baton Rouge, LA Subject Matter Expert for a two-and-a-half-day workshop to provide local Mayors and Parish Presidents, from communities impacted by Hurricanes Laura and Delta, a better understanding of the role of planning, design, and hazard mitigation in improving community resilience. Served as SME to provide inter-disciplinary expertise in the integration of planning, hazard mitigation, coastal and water resource engineering as applied to improved stormwater management and resilience in the face of climate change.
2024	***State of Louisiana Innovative Financing Study, Statewide, LA.*** Principal-in-Charge for this analysis of innovative financing and alternative project delivery methods to expedite and increase the efficacy and cost-effective of coastal flood risk reduction projects included in the State of Louisiana's Comprehensive Master Plan for a Sustainable Coast. Provided implementation guidance for project types on the suitability of potential application for alternative delivery and alternative financing scenarios for several Coastal Master Plan projects.

17. Firm Experience:

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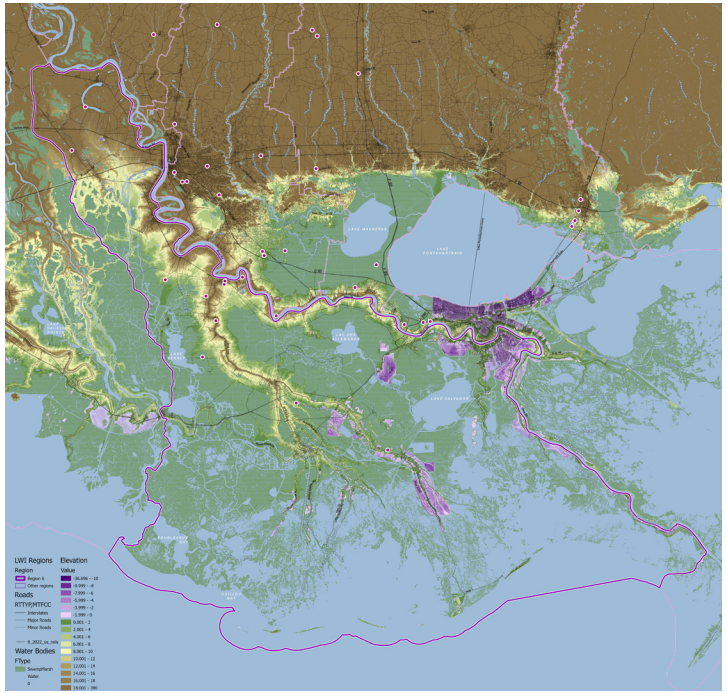
Project name	**LOUISIANA WATERSHED INITIATIVE REGION 6 WATERSHED PLAN**			Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Louisiana Department of Transportation & Development (LaDOTD)		
Project location	LWI Region 6		Owner's Project Manager	Alexandra G. Carter	
Owner's address, phone, email	1205 St. Charles Avenue, Suite D New Orleans, La 70130 / 504-388-0482 / AlexGelpiCarter@desire-line.com				
Services commenced by this firm (mm/yy)	08/24	Total consultant contract cost ($1,000's)		460	
Services completed by this firm (mm/yy)	(E) 05/26	Cost of consultant services provided by this firm ($1,000's)		153	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Moffatt & Nichol is utilizing modeling to support decision-making, evaluate mitigation actions, and assist in developing goals for the region.

Region 6 Watershed Plan

As a subconsultant, Moffatt & Nichol is using the Louisiana Watershed Initiative (LWI) Region 6 models to support decision-making, evaluate mitigation actions, and assist in developing near, mid, and long-term goals for the region. Moffatt & Nichol is supporting plan development, project scoping, and regional adaptation strategies. Additionally, we are facilitating community outreach to ensure local engagement and alignment with regional priorities.



Prime consultant name: DESIRE LINE

17. Firm Experience:

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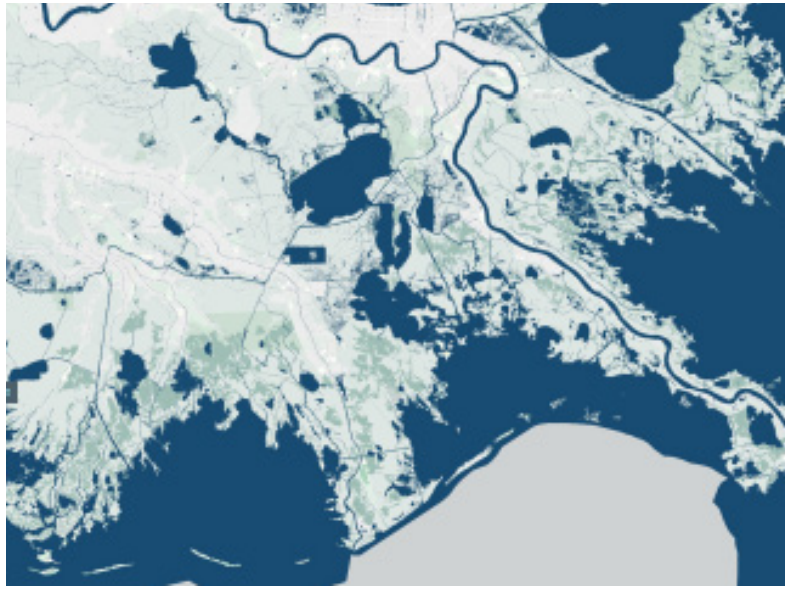
Project name	**LOUISIANA WATERSHED INITIATIVE IDIQ MODELING CONTRACT**			Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Louisiana Department of Transportation & Development (LaDOTD)		
Project location	LWI Region 6		Owner's Project Manager	Eric Erikson	
Owner's address, phone, email	2600 Citiplace Dr, Baton Rouge, LA 70808 / 225-218-2849 / Eric.Erikson@mbakerintl.com				
Services commenced by this firm (mm/yy)	08/24	Total consultant contract cost ($1,000's)		1,000	
Services completed by this firm (mm/yy)	(E) 05/26	Cost of consultant services provided by this firm ($1,000's)		611	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

As a subconsultant, Moffatt & Nichol contributed to the development of hydraulic models for two (2) HUC10s, which were integrated into the model package for the East Central Louisiana Coastal subbasin [USGS Hydrologic Unit Code (HUC8) 08090301]. This subbasin, located within Louisiana Watershed Initiative Region 6, spans 2,700 square miles and includes coastal and transition zones in Louisiana. It encompasses all or parts of Ascension, Assumption, Jefferson, Lafourche, Plaquemines, St. Charles, St. James, and St. John the Baptist parishes. A two-dimensional (2D) HEC-RAS model was developed to represent the Transition Zone, with coastal modeling results from the CPRA 2023 Coastal Master Plan (CMP) used as boundary conditions. This collaborative effort ensured the successful integration of hydrological and hydraulic modeling into the overall subbasin analysis. Moffatt & Nichol's tasks included:

- Stakeholder Communication & Engagement (outreach & public meetings)
- Hydrometeorology and Hydrography Data (historical event review, precipitation, streamflow, and stage data collection, historic storm development for model setup and calibration)
- Hydrological Model Development (develop, calibrate and validate HEC-RAS ROG model, hydrologic primary model outputs)
- H&H Model Development (developed HEC-RAS models, boundary conditions, calibrate and validate models, hydraulic primary model outputs)
- Contract Administration and Project Management
- Quality Assurance/Quality Control (internal)



17. Firm Experience:

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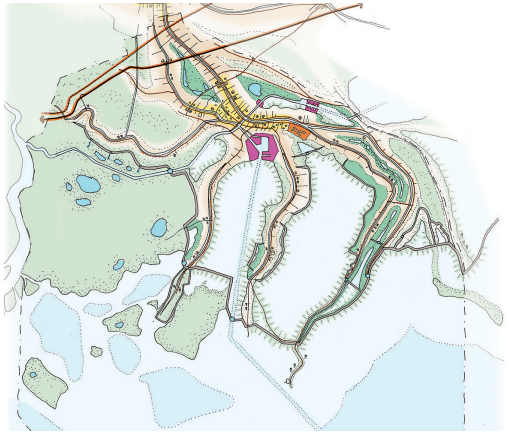
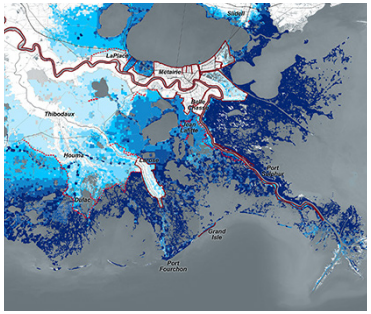
Project name	**LOUISIANA'S STRATEGIC ADAPTATIONS FOR FUTURE ENVIRONMENTS (LA SAFE)**			Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Louisiana Office of Community Development		
Project location	Jefferson, Lafourche, Plaquemines, Terrebonne, St. John the Baptist & St. Tammany Parishes, Louisiana		Owner's Project Manager	Matthew Sanders	
Owner's address, phone, email	901 E St NW, Washington, DC 20004 / 202.540.6716 / msanders@pewtrusts.org				
Services commenced by this firm (mm/yy)	08/17	Total consultant contract cost ($1,000's)		961	
Services completed by this firm (mm/yy)	02/19	Cost of consultant services provided by this firm ($1,000's)		961	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

M&N served as lead designer and risk analyst for LA SAFE (Louisiana's Strategic Adaptations for Future Environments), funded by Louisiana's CDBG-NDR award. Our team led the design effort with research and analysis of the physical characteristics of the land and the subsequent development of adaptation strategies responsive to the specific needs of each area, all within a framework of community engagement.
We led representation of current conditions and future population and coastal projections that accounted for storm surge, land loss and sea level rise. We also led the regional adaptation strategy, individual strategies for six parishes, as well as the design of six catalytic pilot projects per parish. The LA SAFE planning process focused on six parishes heavily impacted by Hurricane Isaac in 2012, including Terrebonne Parish, as well as the region as a whole. Two primary hazards impact Terrebonne Parish: flooding and land loss. Catalytic pilot projects for the parish aim to improve quality of life while mitigating future flood risk.





Prime consultant name: DESIRE LINE

17. Firm Experience:

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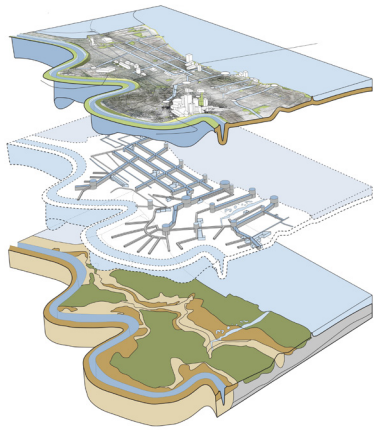
Project name	**GREATER NEW ORLEANS URBAN WATER PLAN**			Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Greater New Orleans INC. & The State of Louisiana Office of Community Development		
Project location	New Orleans, LA		Owner's Project Manager	Michael Hecht	
Owner's address, phone, email	1100 Poydras Street, Suite 3475, New Orleans, LA 70136 / 504.527.6900 / mhecht@gnoinc.org				
Services commenced by this firm (mm/yy)	02/13	Total consultant contract cost ($1,000's)		Unkown	
Services completed by this firm (mm/yy)	11/13	Cost of consultant services provided by this firm ($1,000's)		$1,001	

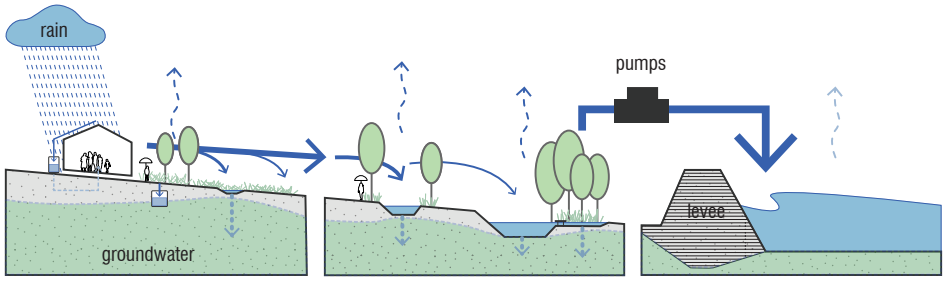
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

A new approach to risk reduction that redefines New Orleans's water environment for a safer, greener, and more equitable future.

New Orleans has always been defined by water, and today the region faces ongoing challenges from rainfall flooding and subsidence despite the protection of a 100-year levee system. The Greater New Orleans Urban Water Plan presents a comprehensive, science-based strategy illustrating how the region can live with water rather than fight it. Developed across multiple scales—from regional frameworks to neighborhood demonstration projects—the Plan outlines actionable design, engineering, and policy approaches and is publicly available at livingwithwater.com.

Following Hurricane Katrina, Waggonner & Ball led efforts to rethink water management in Southeast Louisiana by initiating collaborations with Dutch water experts and organizing the Dutch Dialogues workshops. These workshops paired local and international designers and engineers to study how water could shape safer, more resilient, and higher-value urban environments. The ideas forged through this exchange established the foundation for "Delta Urbanism" in New Orleans and ultimately informed and expanded into the Urban Water Plan.





Prime consultant name: DESIRE LINE

17. Firm Experience:

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Project name	**ZONE-1: REGIONS, 1, 2, 3, AND 5 PRODUCTION AND TECHNICAL SERVICES (PTS)**			Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	FEMA		
Project location	New England, Mid-Atlantic, Great Lakes, Puerto Rico, and US Virgin Islands		Owner's Project Manager	Luis Rodriquez	
Owner's address, phone, email	500 D Street, NW Washington, DC 20471 /202.646.4064 / luis.rodriquez3@fema.dhs.gov				
Services commenced by this firm (mm/yy)	09/24	Total consultant contract cost ($1,000's)		$3,000	
Services completed by this firm (mm/yy)	09/26	Cost of consultant services provided by this firm ($1,000's)		$625	

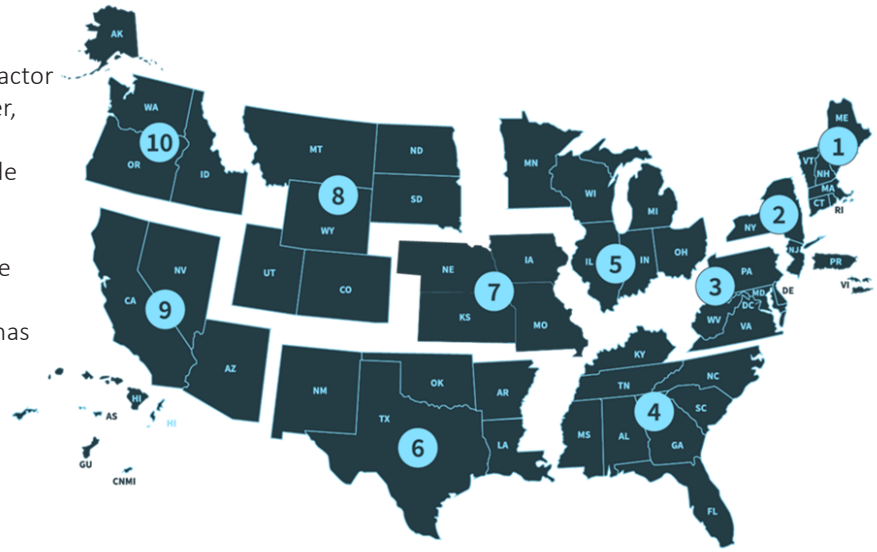
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Moffatt & Nichol has supported FEMA's Risk MAP program since 2021 as a prime joint venture partner under the Production and Technical Services (PTS) contract.

Since 2021, Moffatt & Nichol has served as a FEMA Production and Technical Services (PTS) contractor through the Joint Venture (JV), Advancing Resilience in Communities (ARC), as a prime JV member, within Zone-1. The PTS contract supports FEMA RiskMAP, HMTAP and TARC programs. Zone-1 supports FEMA Regions 1, 2, 3, and 5 including Puerto Rico and Virgin Islands. PTS services include providing technical expertise to support FEMA's administration of the National Flood Insurance Program, such as generating/evaluating flood hazard and risk information and supporting the development and application of mitigation, planning, flood mapping, and modeling activities. The contract falls under the Federal Insurance and Mitigation Administration's (FIMA) Risk Mapping, Assessment and Planning (Risk MAP) program. Moffatt & Nichol's range of professional services has included the following:

- Gauge analysis
- Field reconnaissance and data collection
- Riverine and coastal flood modeling
- Floodplain and flood hazard mapping Community outreach
- Post-preliminary processing
- Reviewing and addressing appeals
- Evaluation of previous studies
- Coordination with FEMA regional staff

Through various projects and studies, Moffatt & Nichol has developed a bench of professionals that are well-versed in FEMA procedures, methodology, and regulations and are accustomed to communicating with FEMA staff at all levels.



Prime consultant name: DESIRE LINE

17. Firm Experience:

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Project name	**BUCKTOWN LIVING SHORELINE ENGINEERING, AND DESIGN**			Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Jefferson Parish Ecosystem and Coastal Management Department		
Project location	Jefferson Parish, LA		Owner's Project Manager	Michelle Gonzales	
Owner's address, phone, email	834 S. Clearview Parkway, Harahan, LA 70121/ mgonzales@jeffparish.net / 504-736-6653				
Services commenced by this firm (mm/yy)	11/23	Total consultant contract cost ($1,000's)		60	
Services completed by this firm (mm/yy)	12/25	Cost of consultant services provided by this firm ($1,000's)		45	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

The south shore of Lake Pontchartrain faces significant erosion from wave action, putting the adjacent levee, community, and infrastructure at risk.

Jefferson Parish's Ecosystem and Coastal Management Department engaged Moffatt & Nichol (M&N) to complete a feasibility study, engineering design, and construction-phase services for a long-term, nature-based shoreline protection solution. Goals included reducing erosion, restoring riparian habitat, and strengthening the resilience of the Lake Pontchartrain & Vicinity Hurricane Storm Damage Risk Reduction System.

M&N evaluated approximately 7,800 linear feet of shoreline between Bucktown and the Causeway, using advanced wave modeling to assess site conditions, analyze breakwater performance, and inform conceptual design, cost, and risk-reduction options. The Parish and project team selected a living shoreline approach—developed with CPRA as a cost-share partner—combining marsh creation, shoreline protection, and enhanced public access.

The final design includes approximately 4,500 linear feet of offshore segmented breakwaters to reduce wave impacts and protect the levee, along with the creation of roughly 33 acres of new marsh habitat, building a more resilient and ecologically rich shoreline system.

Prime consultant name: DESIRE LINE

17. Firm Experience:

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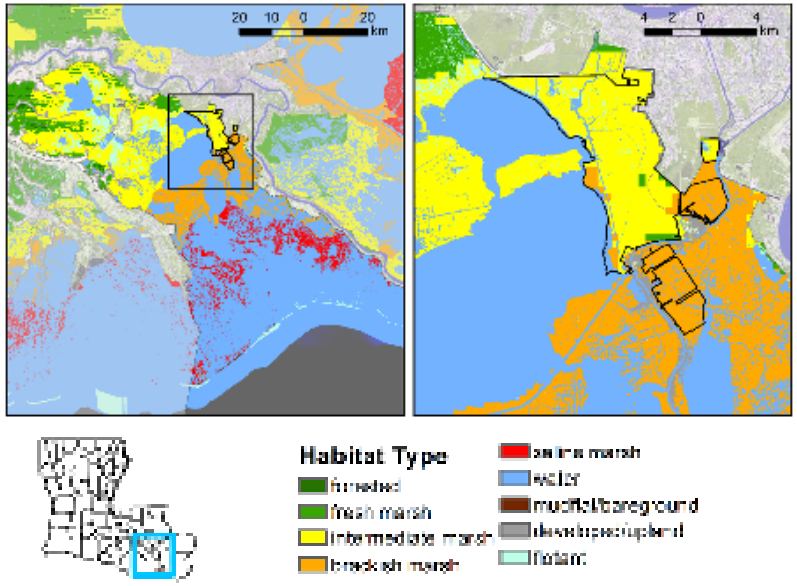
Project name	**BARATARIA PRESERVE FUTURE CONDITIONS MODELING : JEAN LAFITTE NATIONAL PARK**			Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Louisiana Department of Transportation & Development (LaDOTD)		
Project location	Jefferson Parish, LA		Owner's Project Manager	Julie L. Whitbeck, Ph.D.	
Owner's address, phone, email	National Park Service, 1849 C Street NW, Washington, DC 20240 / 504.717.9811 / Julie_Whitbeck@nps.gov				
Services commenced by this firm (mm/yy)	09/20	Total consultant contract cost ($1,000's)		141	
Services completed by this firm (mm/yy)	03/22	Cost of consultant services provided by this firm ($1,000's)		141	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

The Barataria Preserve protects 26,000 acres of primarily freshwater deltaic wetlands in the Mississippi River delta's Barataria Basin. These wetlands are among the most biologically productive ecosystems in North America and they sustain some of the richest fisheries on the planet. The preserve's floating marshes are one of only four large estuarine floating freshwater marsh systems in the world. Jean Lafitte National Park (the park) aims to protect and conserve the natural landscape, its biological diversity, its human history and the diverse cultural traditions it has inspired and nurtured. The objective of the Barataria Preserve Future Conditions Modeling project is to provide National Parks Service managers with scientifically rigorous projections of key coastal environmental conditions across the Barataria Preserve landscape over the next decades. The park will use these projections to inform and guide park planning and to prioritize management endeavors over this interval.



Prime consultant name: DESIRE LINE

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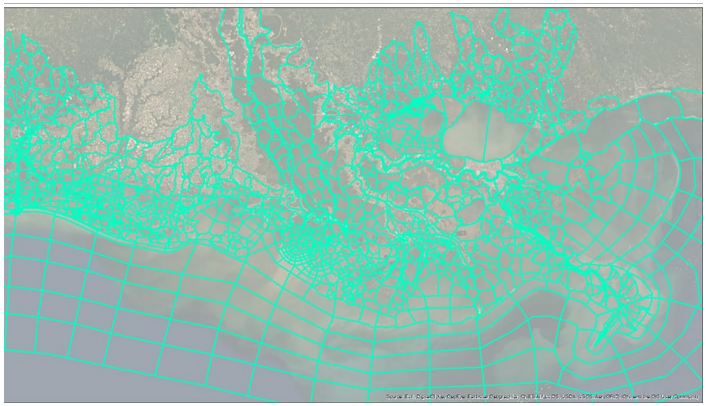
Project name	**COASTAL MASTER PLAN PROJECT DELIVERY TEAM**			Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Coastal Protection and Restoration Authority		
Project location	Coastal Louisiana		Owner's Project Manager	Jammie Favorite	
Owner's address, phone, email	P.O. Box 44027 Baton Rouge, LA 70804-4027/ 225-342-4119 / jammie.favorite@la.gov				
Services commenced by this firm (mm/yy)	07/19	Total consultant contract cost ($1,000's)		1,700	
Services completed by this firm (mm/yy)	09/23	Cost of consultant services provided by this firm ($1,000's)		95	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Since 2011, Moffatt & Nichol has assisted the Louisiana Coastal Protection and Restoration Authority (CPRA) in the development and improvement of a suite of modeling tools to evaluate hundreds of projects and to assess their effectiveness in achieving restoration and protection goals. Moffatt & Nichol's experience developing and improving the CPRA Integrated Compartment Model (ICM) provided the team with unique expertise in the particular modeling tools used to support CPRA master planning efforts and ensure consistency with the master plan when assessing specific project feasibility and impacts using the latest restoration science. Originally developed for the 2012 Coastal Master Plan, the ICM modeling components were updated, improved, and integrated with Moffatt & Nichol's help for the 2017 update to the Coastal Master Plan. During this work, hundreds of projects were modeled for 50 years into the future to determine effectiveness in achieving restoration and protection goals and prioritize investments.

The CPRA developed the 2023 update to the Coastal Master Plan by modeling future scenarios and proposed projects with an updated and improved version of the ICM. Updates to the modeling approach for the 2023 Coastal Master Plan generally included improved integration of models and components, incorporating newly available data (including updated topographic, bathymetric, and wetland vegetation data) and applying new approaches to better capture wetland morphology processes (Baustian et al., 2020). The ICM-Hydro module, responsible for computing stages and salinities across the coast, was updated to include coupled 1D hydrodynamic models for four major rivers and channels (including the Lower Mississippi River), and compartments and links were re-delineated to better correspond to coastal features. However, the basic mass-balance type approach for computing stages, flows, and salinities in wetland and coastal areas remains unchanged from that used in the 2017 Coastal Master Plan (Brown et al., 2017).



Prime consultant name: DESIRE LINE

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
Louisiana Watershed Initiative Region 6	Desire Line LLC	25,723.95	5/31/2026
Mercy Hospital Development Design Phase	Woodwood Interests	14,150.50	12/31/2025
Bayou Manchac Regional Review	McKim & Creed	24,469.51	5/31/2026
Lillian Swamp/Bronson Field	The Nature Conservancy	420,468.16	12/31/2026
Morganza to the Gulf SEIS Modeling Support	Delta Coast Consultants	176,974.20	5/1/2026
2029 Coastal Master Plan: ICMv25 Development and FWOA Simulation Support	CPRA	55,041.86	2/1/2026
Mirabeau Garden Stormwater Management and Flood Mitigation	City of New Orleans	144,663.15	3/31/2026
New City Park at Landfill (America Street) Site	City of Mandeville	223,725	5/31/2027
New City Park at 12X (West Toll Plaza) Site	City of Mandeville	91,0277	6/30/2028
New City Park at Carroll Street Sites Fee	City of Mandeville	246,592	10/31/2026
City of Mandeville Park Design	City of Mandeville	267,450	08/31/2026
United Houma Nation (UHN) Rising Project	United Houma Nation, Inc.	1,193,367	05/26/2028
Terrebonne Parish Community Resilience Centers	Terrebonne Parish Consolidated Government	320,000	04/30/2026

19. Staffing Capacity:

Referencing Section 17 where appropriate (i.e., where key personnel would be working on multiple projects simultaneously) describe how your firm will ensure that sufficient staffing and capacity will be made available for the conduct of this project.

A dedicated team ready to meet the project timeline and deliver consistent progress

We have assigned a multidisciplinary team that is available and prepared to support the project from kickoff through completion. Our internal scheduling ensures that each phase—whether it be community engagement, conceptual planning, or final deliverables—will be staffed by professionals with the right expertise at the right time. Team members are committed for the duration of the project, allowing for consistent communication, deep knowledge of the project's evolution, and strong working relationships with the client and stakeholders. We prioritize responsiveness and adaptability, ensuring that we can pivot quickly to meet evolving project needs without sacrificing quality or schedule.