



City of Fort Lauderdale

Environmental Engineering Consulting Services, Continuing Services Contract

RFQ EVENT No. 501 | Due: September 15, 2025



Tab 1 Table of Contents

Tab 2 Executive Summary	2
Tab 3 Firm Qualifications and Experience	4
Firm Experience with the City.....	4
Firm Experience with Similar Contracts.....	4
Relative Size of Firm.....	5
Sustainable Business Practice Initiatives.....	5
Business Structure/Years of Experience	6
Location and Contact Information.....	7
Details of Similar Past Projects	8
Scope Item Experience.....	36
Tab 4 Qualifications of the Project Team	45
Key Staff/Scope Experience Matrix	45
Key Staff Resumes	47
Key Staff / Firm Licenses	59
Organizational Chart.....	69
Tab 5 Approach to Scope of Work	70
Understanding of the City's Needs, Goals and Objectives.....	70
Opportunities for Enhanced Services.....	71
Proposed Vision, Ideas and Methodology.....	72
Project Approach	72
Management Approach	72
Contract Management:.....	72
QA/QC:	73
Scheduling Methods:.....	73
Current and Projected Workload.....	73
Technological Capabilities and Resources.....	74
Tab 6 References	75
Tab 7 Minority/Women (M/WBE) Participation	76
Tab 8 Sub-consultants	77
Tab 9 Required Forms.....	78

Tab 2 Executive Summary

RES Florida Consulting, LLC is pleased to express our interest in continuing to provide Environmental Engineering Services to the City of Fort Lauderdale (City). As an incumbent on this contract, our staff is very experienced at providing the type of services requested. We have been attentive to the City's needs for the past 18 years and maintain a thriving consulting business based in Fort Lauderdale. With RES' roots in the City and many of our staff residing here, we understand the nuances necessary to meet the needs and interests of the business community and the residents, the many fiscal challenges and the City's goals. Through our vast experience in working for municipalities and other government entities we understand the need to withstand the scrutiny of many competing interests while striving to reach a balance. We are committed to continuing to provide quality environmental consulting services to the City as a preferential client.

We have selected **Ms. Rachel E. Vitek, GISP**, to be our contract manager. Ms. Vitek has 15 years of environmental compliance experience in Southeast Florida and across the state. She has successfully managed contracts for numerous local cities and state agencies including the Cities of North Miami Beach, Weston, and Cooper City, the Town of Southwest Ranches, and multiple Florida Department of Transportation (FDOT) Districts. Ms. Vitek is based in the RES Fort Lauderdale office and is a past president of the Junior League of Greater Fort Lauderdale, where she spearheaded the human trafficking awareness initiative, among others. **Ms. Nadia G. Locke, PE, LEED AP**, previous contract manager, will move into the Quality Assurance/Quality Control (QA/QC) manager role. Ms. Locke has more than 35 years of environmental engineering experience in Southeast Florida. Ms. Locke is based in the RES Fort Lauderdale office and has been a resident and homeowner in Fort Lauderdale for over 30 years.

Please consider the following key benefits offered by RES:

Fort Lauderdale Firm. RES first opened our office in uptown Fort Lauderdale in 2022 because this is where key staff resides and many of our clients are located. We are now located at 312 SE 17th Street in Fort Lauderdale. Our firm is committed to the City's mission of providing a sustainable lifestyle. Our commitment is demonstrated by community-based initiatives like our humanitarian and environmental volunteer efforts in the City such as those with the Broward County Cooperative Feeding Program, Broward Partnership, removal of non-native vegetation in Snyder Park, and removal of trash from the beach and waterways.

History of Delivering Projects on Time and Under Budget. RES has a reputation for delivering projects on time and under budget. We have consistently met our deadlines on City projects. We have even delivered projects early, when needed, to meet the City's goals. On occasion, we have been given a contractual time frame initially contemplated during the preparation of a task order but expedited our services to deliver prior to our required deadlines to meet the City's needs. Examples include our delivery of benthic survey reports one week early to facilitate a project schedule, and our ability to respond to urgent needs such as responding to emergency calls contractors discovered contamination during construction on city projects along Sistrunk Boulevard, within the Las Olas Intracoastal Park and one of the fire stations.

Also, we have never exceeded a project budget, and typically come in under budget, returning funds back to the City to fund other projects.

Local Leadership. Our key staff has held positions in the community such as Board Member of the Downtown Riverwalk, the City Community Advisory Board, the Smart Growth Partnership (SGP) and participation on several other Broward County Boards (Climate Change Task Force, Brownfields Redevelopment Task Force, Metropolitan Planning Organization (MPO) Community Advisory Committee, etc.).

Fort Lauderdale Knowledge, Experience and Reputation. RES has provided support to the City on a wide variety of projects and has developed a working knowledge of the City's structure and processes. We have gained the respect and confidence of staff members in many departments.

Sustainability is the core of our vision and mission. At RES, our vision is to restore a resilient Earth for a modern world. Our mission includes supporting the rehabilitation and stewardship of

RES
Ecometrics



1,097,132

POUNDS WATER QUALITY
NUTRIENTS REMOVED



28,140,473

TREES PLANTED



77,899

ACRES WETLANDS
RESTORED



88,429

ACRES LAND
CONSERVED & PROTECTED



690

MILES STREAMS RESTORED



20,401

ACRES SPECIAL-STATUS
SPECIES HABITATS PROTECTED



431

MILES SHORELINE &
TERRACES RESTORED

nature's resources alongside responsible human progress. We exist as a company to focus on the planet's sustainability, based on the projects we deliver for clients. Our Ecometrics track our annual and all-time ecological uplift as we restore the nation's land and waters, project by project.

Environmental, Ecological, Engineering and Sustainability Focus. Our staff is dedicated to the profession of engineering and science as it relates to environmental and sustainability projects. We are experts in bridging the gap between the science and engineering of environmental consulting and planning, construction, public interests and funding. In this submittal you will see a well-rounded team of professionals who are not only experienced in the services requested but provide a holistic and integrated approach to assisting the City achieve its goals.



Tab 3 Firm Qualifications and Experience

RES Region 8 (Florida) is focused on providing environmental, engineering, ecological and sustainability advisory services. Our staff includes registered professionals and degreed scientists whose expertise provides a comprehensive and combined set of skills that support our clients' goals through and beyond the planning, design and construction phases of their projects.

Firm Experience with the City

RES has maintained an office within Fort Lauderdale for 20 years. This office houses our Florida regional leadership staff. Several of our staff live here, including our QA/QC manager who is a homeowner in Riverside Park and has lived in the City for 30 years. She is also one of our regional manager so her support on this contract goes beyond QA/QC, as she also ensures that our contract manager has the resources needed to provide top quality services to the City. Several of our staff also live in the City.

Not only are we personally and professionally invested in the City, we have a great amount of professional experience working on City projects and private projects within the City. We were awarded our first continuing services agreement for providing environmental engineering to the City in 2007. We have maintained this contract through repeat procurement processes until present day. Under these multiple contracts, we provided the City with the large breadth of this RFQ's scope items. Many of the scope items happen to be our specialty. Items that relate to our natural systems (e.g. benthic surveys, wetland design) are a large part of our business. Services such as those related to stormwater systems and nutrient removal are core service lines. Monitoring tidal and groundwater elevations was a service we have historically provided as part of our private wetland work, but we have now also been focused on this service for our municipal clients to assist with planning for sea level rise.

Firm Experience with Similar Contracts

In addition to the services we have provided for the City, we have also been awarded **prime continuing environmental engineering and science service contracts** with the following Southeast Florida government entities:

- City of Pompano Beach (three terms)
- City of Hollywood
- City of Miami (two terms)
- City of Miami Beach (two terms)
- City of North Miami (two terms)
- City of North Miami Beach (two terms)
- FDOT District Four (three terms)
- Palm Beach County
- Islamorada, Village of Islands (two terms)
- Broward County
- St. Lucie County
- City of Palm Beach Gardens
- City of Marathon
- Treasure Coast Regional Planning Council (TCRPC) (four terms)

RES' overall Florida experiences serving local governments is a region-wide practice. In addition to our local contracts, we have been awarded continuing services contracts with the following government entities:

- City of Orlando
- City of Oviedo
- City of Daytona Beach
- The Villages
- Brevard County
- Volusia County
- City of Melbourne
- Orange County
- FDOT Districts One, Three, Four, Five and Seven
- City of DeBary
- City of Eustis
- City of Haines City
- City of Ocala

The City will benefit from having the same staff from the above Southeast Florida contracts working on your projects. Our contract manager, Ms. Vitek, has conducted work for most of the Southeastern Florida cities listed. Several specific project



examples of our experience in providing the professional services indicated in the scope of services are included in the project examples presented at the end of this section.

Relative Size of Firm

RES offers the following well-rounded, diverse and talented professional staff to our clients. Below is a list of staff by discipline in Region 8, Florida. Besides the administrative staff, all our management personnel are also degreed engineers or scientists who work on projects. This keeps our overhead low and our management engaged in the business of serving our clients. This structure results in our ability to make sound, rapid, informed business decisions based upon evolving professional and technical trends. The adjacent table provides the number of staff by discipline.

Number of Staff	Discipline
8	Administrative
4	Civil Engineer
11	Ecologist
11	Environmental Engineer
27	Environmental Scientist
2	GIS Specialist
2	Geologist
4	Project Manager
4	Technicians/Interns
1	Scheduler
11	Other

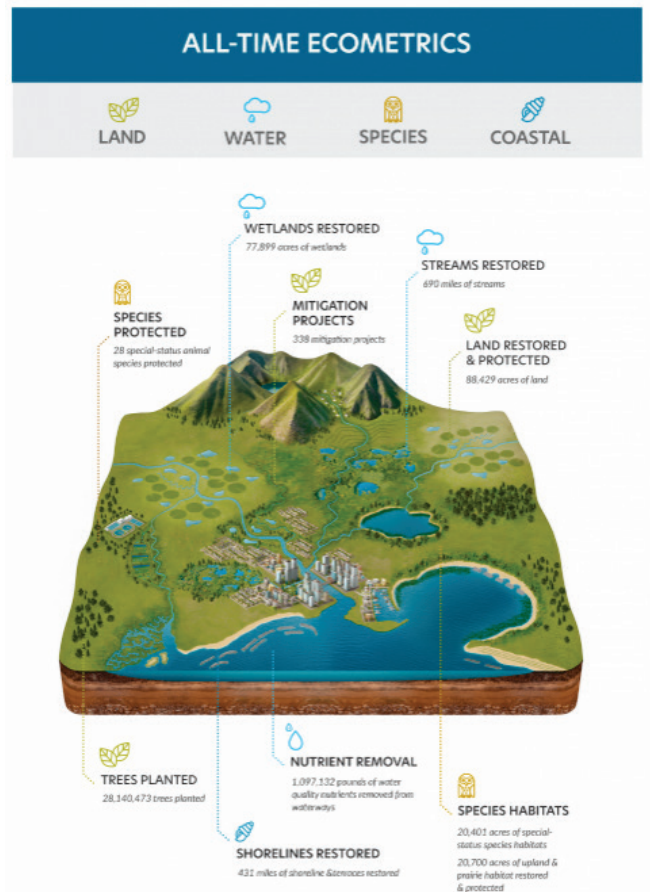
Sustainable Business Practice Initiatives

Sustainability is the core of our vision and mission. At RES, our vision is to restore a resilient Earth for a modern world. Our mission includes supporting the rehabilitation and stewardship of nature’s resources alongside responsible human progress. We exist as a company focusing on the planet’s sustainability, based on the projects we deliver for clients. Our Ecometrics track our annual and all-time ecological uplift as we restore the nation’s land and waters, project by project.

Furthermore, as a business practice, RES strives to provide innovative and practical solutions to issues that impact the environment. Our staff is acutely aware that our own personal positive environmental actions over time will conserve valuable natural resources. As part of our goal to operate as an environmentally aware company, RES emphasizes an “eco-philosophy” style of corporate management, and we continuously evaluate our consumption of non-renewable resources and develop strategies at all levels for reducing and eliminating excess consumption.

Our foundational office is located in the oldest commercial structure in downtown Orlando, with intent to recycle on a much grander scale – repurposing a valuable piece of Central Florida’s history, rather than erecting a new structure. This property is located in a designated Brownfield area. Great care was taken to renovate the Orlando office with energy-saving equipment and infrastructure.

- All original doors were re-used as office-partitions
- Motion sensor lights were installed in all locations using energy efficient ballast fluorescent strips and bulbs
- Air conditioning system was replaced with high-efficiency systems
- An energy efficient/high insulation value roof was installed
- Plumbing fixtures were replaced with low flow fixtures
- Carbon neutral Milliken modular carpeting was installed (in squares that are recyclable material and can be independently replaced as necessary, thereby reducing chemical cleaning and full replacement impacts). This carpeting meets the NSF 140 Sustainable Carpet Assessment Standard, Consensus Sustainable Product Standard Platinum (only carpet to the earn LEED Sustainable Platinum certification)
- Recycled porcelain tile was installed on four-bathroom floors and walls





RES employees volunteer in community and coastal cleanup initiatives, tree plantings, efforts to restore wildlife habitats, and development of sustainable housing and recycling initiatives. Each spring and during the holidays we commit the resources of the company to assist communities and non-profits with consulting services and labor for an entire day. Although we volunteer in a variety of locations, the following corporate-sanctioned volunteer efforts have benefited the Fort Lauderdale Community:

- Training for Eagle Scout Environmental Science Merit Badge
- Exotic species removal and volunteer breakfast sponsor at Snyder Park
- Two volunteer events at the Cooperative Feeding Program Terrace
- Holiday food drive and reception for Cooperative Feeding Program
- Native planting/carbon sequestration evaluation "outdoor" living classroom at Virginia Shuman Young Elementary School
- Co-Chair of Environmental Day for Leadership Fort Lauderdale
- Workday in the warehouse at the Broward Partnership
- Numerous volunteer events at and for the Downtown Riverwalk
- Beach and waterways cleanups



RES at Chili Cookoff Downtown

These, of course, do not include the vast hours of community service provided by our employee residents who serve on various commission appointed boards on their own time.

Business Structure/Years of Experience

RES Florida Consulting, LLC, founded in 2000, is a wholly owned subsidiary of Resource Environmental Solutions, LLC (together with its subsidiaries and affiliates, "RES"). RES employs over 900 dedicated employees in offices across the country. RES Region 8 (Florida) has been providing the professional services outlined in this RFQ for 25 years. As evidenced by the corporate certificate and licenses shown, we are certified to conduct business and provide professional engineering and geological services in the State of Florida. Subconsultant firm licenses follow the RES information.


State of Florida Department of State

I certify from the records of this office that RES FLORIDA CONSULTING, LLC is a limited liability company organized under the laws of the State of Florida, filed on January 19, 2022, effective August 29, 2000.

The document number of this limited liability company is L22000019779.

I further certify that said limited liability company has paid all fees due this office through December 31, 2025, that its most recent annual report was filed on February 11, 2025, and that its status is active.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Thirteenth day of February, 2025



Secretary of State

Tracking Number: 8449116418CU

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- [Unlicensed Activity Search](#)
- [AB&T Delinquent Invoice & Activity List Search](#)

LICENSEE DETAILS

Licensee Information	
Name:	RES FLORIDA CONSULTING, LLC (Primary Name)
Main Address:	E SCIENCES (DBA Name) 34 EAST PINE STREET ORLANDO Florida 32801
County:	ORANGE

License Information	
License Type:	Engineering Business Registry
Rank:	Registry
License Number:	8691
Status:	Current
Licensure Date:	10/10/2000
Expires:	2/27/2027

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LICENSEE DETAILS

This is a business tracking record only.
Click here for information on how to verify that this business is properly licensed.

Licensee Information	
Name:	RES FLORIDA CONSULTING, LLC (Primary Name)
Main Address:	E SCIENCES (DBA Name) 34 EAST PINE STREET ORLANDO Florida 32801
County:	ORANGE

License Information	
License Type:	Geology Business Information
Rank:	Business Info
License Number:	1459
Status:	Current
Licensure Date:	11/22/2002
Expires:	7/31/2026

Special Qualifications	Qualification Effective




Alternate Names



AirQuest Environmental, Inc. (AirQuest)

License Type	Name	Name Type	License Number/Rank	Status/Expires
Asbestos Consultant	AIRQUEST ENVIRONMENTAL INC	DBA	AX60 Consultant - AX	Current, Active 11/30/2026
Main Address*: 6851 SW 45 ST DAVIE, FL 33314				
Geology Business Information	AIRQUEST ENVIRONMENTAL INC	Primary	Business Info	Current
Main Address*: 6851 SOUTHWEST 45TH STREET FORT LAUDERDALE, FL 33314				
Asbestos Business	AIRQUEST ENVIRONMENTAL, INC.	Primary	ZA304 Asbsts Business	Current 11/30/2025
License Location Address*: 6851 SOUTHWEST 45TH STREET FORT LAUDERDALE, FL 33314				
Main Address*: 6851 SW 45TH STREET FORT LAUDERDALE, FL 33314				
Engineering Business Registry	AIRQUEST ENVIRONMENTAL, INC.	Primary	31305 Registry	Current
Main Address*: 6851 SW 45TH STREET FORT LAUDERDALE, FL 33314				

Eurofins

State of Florida
Department of Health, Bureau of Public Health Laboratories
This is to certify that


E83018
EUROFINS ORLANDO
481 NEWBURYPORT AVENUE
ALTA MONTE SPRINGS, FL 32701

has complied with Florida Administrative Code 64E-1,
for the examination of environmental samples in the following categories


DRINKING WATER - GROUP I UNREGULATED CONTAMINANTS, DRINKING WATER - GROUP II UNREGULATED CONTAMINANTS, DRINKING WATER - MICROBIOLOGY, DRINKING WATER - OTHER REGULATED CONTAMINANTS, DRINKING WATER - PRIMARY INORGANIC CONTAMINANTS, DRINKING WATER - SECONDARY INORGANIC CONTAMINANTS, DRINKING WATER - SYNTHETIC ORGANIC CONTAMINANTS, NON-POTABLE WATER - EXTRACTABLE ORGANICS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER - MICROBIOLOGY, NON-POTABLE WATER - PESTICIDES-HERBICIDES-PCBS, NON-POTABLE WATER - VOLATILE ORGANICS, SOLID AND CHEMICAL MATERIALS - EXTRACTABLE ORGANICS, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS - MICROBIOLOGY, SOLID AND CHEMICAL MATERIALS - PESTICIDES-HERBICIDES-PCBS, SOLID AND CHEMICAL MATERIALS - VOLATILE ORGANICS

Continued certification is contingent upon successful on-going compliance with the NEIAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Public Health Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

Date Issued: July 01, 2025 Expiration Date: June 30, 2026



Marie-Claire Rowellson, PhD, DJABMW
Bureau of Public Health Laboratories
DH Form 1807, 10/4
NON-TRANSFERABLE E83018-104-0701/2025
Supersedes all previously issued certificates



Location and Contact Information

RES maintains offices in Fort Lauderdale, Orlando, Miami, and DeLand. Our management location and main contact for this contract are listed below.

Ms. Rachel Vitek, MS, GISP,
312 SE 17th Street, Suite 200, Fort Lauderdale, FL 33316 | 954.484.8500
407.967.0451 | revitek@res.us
www.res.us



Details of Similar Past Projects

RES has multiple contracts under which similar services requested by the City in this RFQ have been performed. On the following pages are ten contract examples of similar size and/or scope, which include examples of our ability to meet and time and budget requirements.



Continuing Contract for General Environmental Engineering

City of Fort Lauderdale | City of Fort Lauderdale, Broward County, Florida

RES was awarded a contract with the City to provide ongoing environmental engineering support during three separate consultant selection processes. The scope of the contract is broad and provided us with a wide range of opportunities to support the City. The following summarizes some of the projects completed:

Himmarshee Canal Assessment: Relevant aspects of this project focused on planning and design for canal dredging of a surface water, restoration of a river, construction administration, environmental permitting support, sediment assessment, biological monitoring/submerged aquatic vegetation survey and mapping, development of an effective water quality monitoring plan, environmental monitoring and assessment of surface water, laboratory analysis of water and sediment, public engagement support, project management and quality assurance/control.



The City identified a sewer force main break that caused 13 million gallons of wastewater from the force main to flow into the Himmarshee Canal. The City entered into an Amended Consent Order with the Florida Department of Environmental Protection (FDEP) that obligated the City to complete an "environmental analysis" of the Himmarshee Canal to assess potential impacts caused by the unauthorized

discharge. In response, RES prepared a Water Quality Assessment Plan that was approved by FDEP without comment. RES evaluated potential sediment impacts to approximately 1,600 linear feet of the Himmarshee Canal using a variety of methods including consideration of natural, cultural, and physical environmental resources; review of ambient water quality data; characterization of sediment layers; performing laboratory analysis on sediment samples; and conducting a benthic survey. The assessment goals were to identify if sediment, solids, or other indicators of wastewater had accumulated on the canal bottom from solids settling out of the wastewater discharge, identify if residual impacts from the discharge was present, and identify the extent of the impacted area. RES used vibracore technology to collect sediment cores for visual characterization and laboratory analysis. RES worked with the laboratory to develop methods to analyze the sediment for parameters that could be indicative of wastewater, persist in the environment and are not naturally occurring. Sediment samples were analyzed for human waste indicators and bacteria to define the area of impact. Water quality evaluation included nutrients, dissolved oxygen, and enterococci bacteria. A benthic survey using a "go-pro" camera was used to document the river bottom and to evaluate the presence of submerged aquatic vegetation. A hydrographic survey was conducted and the information used to estimate the dredge material volumes for the purposes of obtaining contractor bids. RES collaborated with the U.S. Army Corps of Engineers (USACE), FDEP and Broward County to identify ways to streamline the agency permitting and authorization procedures in support of the development of a sediment removal plan. Weekly updates were provided to the City to be disseminated to the public to keep the residents informed of the project's progress.

The City is electing to remove sediment within the Himmarshee Canal as a surface water quality enhancement project. RES assisted the City with bidding documents, restoration contractor selection, and construction compliance via turbidity monitoring during sediment removal.

AT A GLANCE.

Client Contact

Todd Hiteshew, Environmental Services Manager
Public Works Department
949 NW 38th Street
Fort Lauderdale, Florida 33309
(954) 828-4357 |
thiteshew@fortlauderdale.gov

Contract Value

\$958,853

Project Size

-

Contract Period

2007 – Ongoing

Project Type

Advisory Services

Project Highlights

- NPDES / Water Quality
- Benthic Surveys
- Wildlife Surveys / Relocations
- Phase I and Phase II Environmental Site Assessments
- Sampling
- Agency Permitting
- NEPA
- Soil and Groundwater Testing

Key Staff

- Nadia Locke, PE, LEED AP
- Rachel Vitek, MS, GISP
- Jen Savaro, MS
- Gayle Stone, MS



Tarpon River Restoration: A 54" sanitary sewer force main pipe broke in the Rio Vista neighborhood, adjacent to the Tarpon River. Two breaks caused discharges from the force main to flow into the Tarpon River. The discharges included raw wastewater and sediment laden water from dewatering activities related to the repair of the force main. The Tarpon River is a Class III water, meaning the designated uses include fish consumption, recreation, and propagation and maintenance of a healthy, well-balanced population of fish and wildlife. The City engaged RES to identify the impact area and develop a restoration plan for the affected portion of the Tarpon River. RES used vibracore technology to collect sediment cores for visual characterization and sample collection. Sediment samples were analyzed for human waste indicators and bacteria to define the area of impact. A benthic survey using a "go-pro" camera was used to document the river bottom and to evaluate the presence of submerged aquatic vegetation. A hydrographic survey was conducted and the information used to estimate the dredge material volumes for the purposes of obtaining contractor bids. RES collaborated with the USACE, FDEP and Broward County to identify ways to streamline the agency permitting and authorization procedures and in support of the development of a sediment removal plan. Weekly updates were provided to the City to be disseminated to the public to keep the residents informed of the progress of the project. RES assisted the City with bidding documents and restoration contractor selection. We conducted compliance inspections during restoration. The restoration has been completed.



Bonnet House Greenway Access: RES was engaged by the City to conduct an environmental evaluation for a proposed greenway between Birch State Park through the Bonnet House Museum and Gardens property (Bonnet House) to North Birch Road to the South. The project objectives were to provide connectivity from Sunrise Boulevard and Birch State Park to the island community located south of the Bonnet House property; immersing the user in the mangrove forest; maintaining a distance between the user and the Bonnet House activities and not interfering with the Bonnet House parking or landscaping. This evaluation was conducted to support a grant application for assistance under the National Park Service Rivers, Trails, and Conservation Assistance Program. RES was requested to seek ways to minimize impacts to environmental resources that could be incorporated into the design of the greenway. RES proposed an alternative greenway layout that would reduce mangrove impacts by shifting the greenway into disturbed upland areas towards the south end of the greenway. This alternative layout would also result in decreased impacts to landscape trees and preserve parking areas for the users of the Bonnet House property. Design measures, including an elevated boardwalk and permeable pavement, could be implemented to further reduce impacts to natural resources.

Isle of Palms Seawall 15 Replacement and Climate Change Adaptation: RES provided support to the City in anticipation of replacement of 900 feet of seawall along the west side of Isle of Palms Drive. Sea level rise has caused surface waters to overtop this seawall and flood adjacent land and roads. The purpose of the project was to raise the height of the seawall and protect the shoreline from the effects of climate change. The City engaged RES to conduct a benthic survey to support the design and permitting. Seagrasses were identified and data regarding seagrass bed size, density, incidental species observed, and substrate conditions were recorded and documented. RES collaborated with the design engineers to assist them in obtaining the regulatory agency permits and with the City to inform the construction procurement process. The report was delivered one week before the contract schedule and under budget. Following construction, RES performed a post construction survey to close out the environmental permits.



Fort Lauderdale Executive Airport Endangered Species Surveys, Permitting and Relocation: RES has conducted multiple endangered species surveys, migratory bird and gopher tortoise relocation permitting and relocation for proposed construction projects at Fort Lauderdale Executive Airport. Endangered species encountered, permitted or relocated include burrowing owls and gopher tortoises.

Former Transfer Station: RES was engaged under the City to provide environmental support for the regulatory closure of the former trash transfer station related to the documented soil and groundwater contamination at this property. RES compiled historical assessment information and regulatory requirements to define the areas to be subject to engineering controls (ECs). RES' teams drafted the design drawings depicting the affected areas and technical specifications. The design



documents included soil handling provisions, environmental considerations and approximated quantities. The design documents were prepared for the City to distribute as the proposed scope of work for the bidding package.

Las Olas Circle Site Assessment: An underground storage tank (UST) containing fuel was discovered during installation of a water main at a city-owned project site undergoing redevelopment. A crack developed on the side of the tank and approximately 10 gallons of fuel spilled. RES mobilized to the Site shortly after the tank was discovered and advised the Community Redevelopment Agency (CRA) on measures to secure the tank. The tank was discovered at approximately 3:00 PM and the site was cleaned and secured by approximately 4:30 PM. Removal of the tank, conducted by others, revealed the presence of contaminants above the regulatory standards in the soil and groundwater. The City engaged RES to conduct additional site assessment as required by Broward County Environmental Protection and Growth Management Department (EPGMD). RES conducted soil and groundwater sampling activities to delineate the contaminants detected above the regulatory standards and prepared a Site Assessment Report. Based on evaluation of the analytical data, the contaminants appeared to not be related to the former tank and RES proposed the implementation of alternative cleanup target levels (CTLs) to pursue regulatory closure of the contamination.

National Pollutant Discharge Elimination System (NPDES) Permitting Support: RES has worked with the City to prepare their Total Maximum Daily Load (TMDL) Prioritization Plan and Assessment Program as required to be submitted within Year 1 of the City's NPDES Municipal Separate Storm Sewer System (MS4) permit. During Year 2 of the permit, RES began preparing pollutant load analysis and reviewing monitoring data collected by the County to help the City understand the effects of their stormwater system improvements on neighboring waterbodies, as well as to comply with the permit. In addition, RES prepared the City's Bacteria Pollution Control Plan (BPCP), working with multiple stakeholders in the area for effective reporting and cost savings, which was submitted with the City's Year 3 annual report and approved by FDEP. RES continues to provide ongoing NPDES support as needed to the City including review of the annual report and Standard Operating Procedures (SOPs) to ensure compliance with permit requirements.

Sistrunk Boulevard: RES was hired by the City to conduct soil and groundwater testing along Sistrunk Boulevard from I-95 to Andrews Avenue. The project was conducted in order to support the CRA with implementing a streetscape, drainage and roadway enhancement project. RES conducted soil and groundwater testing at 36 locations to evaluate potential impacts to construction that may arise due to known contaminated sites historically located along the corridor. Potential sites of concern included historical dry cleaners, gasoline stations, junk yards and an incinerator ash landfill.

Prior to implementation, RES worked with the FDOT (who provided funding) to determine a scope of analytical services. RES reconciled the proposed subsurface structure locations (drainage structures, light fixtures, etc.) identified on construction plan sheets with the existing corridor conditions and proximity to potentially contaminated areas. Due to the high number of utilities anticipated to be located in close proximity to the drilling locations, RES engaged a private utility location contractor to locate underground utilities using ground penetrating radar and electromagnetic radiation surveys, in addition to review of City plans and coordination with Sunshine One Call. A Maintenance of Traffic (MOT) plan was prepared and submitted to the City prior to field activities.

In addition to an assessment report, RES provided general notes and bidding specifications language outlining requirements for managing contaminated soils and groundwater to be incorporated into the bidding and contract documents for this project. During construction, we assisted the City in working with the contractor to minimize impacts to construction and keep the project moving. This "stimulus" project meant deadlines were critical and the work needed to be expedited. We developed a scope of work, met with FDOT to negotiate the scope, conducted private utility location, developed an MOT plan, and initiated the sample collection within 13 days of the first phone call. Our draft report was provided to the CRA within an additional 12 working days. This project was completed to the satisfaction of the CRA and FDOT and we delivered the project under budget by more than \$12,000.





Fire Station #49 Emergency Response: This project was undergoing redevelopment with a new City fire station when petroleum contamination was discovered during construction. RES mobilized to the site the same day as requested to further investigate the implications of this finding on construction and regulatory notification. Historic and regulatory records indicated historic underground storage tanks on the property. Consultation with regulatory agencies, collection of soil and groundwater samples and sound environmental judgment allowed this project to proceed with minimal time delay and costs to the project. RES also conducted air monitoring for construction workers to evaluate potential health implications of exposure to the unknown products discovered and to provide the City with appropriate supporting documentation.

Opinion of Post Closure Costs, Wingate Landfill: In response to a City audit, RES was tasked to develop an opinion of post-remediation costs for this Superfund site. Historic and future operations with respect to maintenance and monitoring costs were compiled in several spreadsheets to provide future annual allocations until fiscal year 2032. RES created the spreadsheets such that the costs forecasts may be updated annually.

Wingate Landfill Burrowing Owl Relocation: This hazardous waste superfund site has undergone regulatory closure. A protective cap system was installed at this closed municipal landfill to eliminate potential exposure to contaminants and to prevent migration of contaminants from the landfill into the groundwater. A condition of the closure was to conduct monitoring of groundwater, surface water and fish tissues on a periodic basis for a period of 30 years. During a five-year inspection, the EPA identified the presence of two burrowing owl burrows on top of the capped area of the landfill. The EPA directed the City to remove the burrows and evaluate the integrity of the landfill cap. RES was engaged to evaluate the possible damage, and coordinate burrow removal with state and federal regulatory agencies.



The burrows were scoped using a remote camera and video recorder in an effort to assess whether or not the owls had affected/damaged the geomembrane, and to assess whether there were owls present within the burrows. It was determined that there were no adults, eggs or flightless young in the burrows. The burrows were excavated, and it was found that the cap had not been adversely affected. Following coordination with the EPA, and the FWC, starter burrows were created outside of the cap area to encourage relocation of the owls. The old burrows were removed, and the owls relocated to the area outside the landfill cap.

Fort Lauderdale Executive Airport (FXE) Proposed U.S. Customs and Border Protection Facility: RES was engaged by the City to assist with understanding the outstanding environmental and regulatory issues at a tenant space at the Fort Lauderdale Executive Airport as part of the planning for a future U.S. Customs and Border Protection Facility. The property is currently occupied by another private tenant who historically operated two fueling facilities: one abandoned in place and one recently taken out of service. Our scope of services included tenant interviews, a site visit, review of the tenant's consultant assessment reports, and communications with Broward County's EPGMD. RES provided periodic updates and advised the City in ways to reduce the potential for liability associated with these former fueling systems and reduce the potential for impacts to construction. The facility has since been constructed and the issues closed.

Phase I/II Environmental Site Assessments (ESAs): RES has prepared Phase I ESAs for the City's Neighborhood Services group in order to support federal funding, in preparation for redevelopment and prior to site acquisition. The following sites are examples of these projects: **Twin Lakes:** RES conducted a Phase I ESA and asbestos survey to support the City's purchase and redevelopment of this residence as a park. **Hortt Elementary:** RES conducted a Phase I and Phase II ESAs for the City to support their purchase of this school property intended for redevelopment as a neighborhood park. This property was initially developed by Mr. M.A. Hortt who was one of the early Fort Lauderdale settlers. The project was expedited to meet the constraints of contract timing. **Progresso Village Neighborhood:** This Phase I ESA was conducted to support a grant application for neighborhood improvement projects. **Melrose Manors Neighborhood:** RES conducted a Phase I ESA and HUD Environmental Review for the City's Neighborhood Services group in order to support application for federal funding for decorative light posts. **Lauderdale Manors Neighborhood:** RES conducted a Phase I ESA and HUD Environmental Review for the City's Neighborhood Services group in order to support application for federal funding for decorative light posts. **Golden Heights Neighborhood:** RES conducted a Phase I ESA for the City's Neighborhood Services group in order to support application for federal funding for decorative entranceway signs. **Sailboat Bend Preserve:** RES was hired by the City to conduct a Phase I and II ESA of vacant property being designated for use as recreational space and installation of a "tot lot". The property is adjacent to the City's public works and police department complex. No environmental concerns



were identified. **Parcel Located at 538 NW 9th Avenue:** RES was engaged by the City's CRA to conduct a Phase I ESA of this property, located across the street from the CRA building. This vacant lot was being procured by the CRA as part of an assemblage of parcels for future development opportunities along Sistrunk Boulevard. **Parcel located at 18 NW 1st Avenue:** RES was engaged to conduct a Phase I on the commercial property that houses a convenience store as well as offices and a meeting room. The City rents of the office and meeting space from the owner and was looking to purchase the property to continue this use. Multiple environmental concerns were noted during the assessment from offsite properties that had the potential to have impacted the site. **Six Parcels located near NW 22nd Road and NW 24th Avenue:** RES was engaged by the City to conduct a Phase I ESA on six vacant lots that are currently zone community business or multi-family residential. The lots were conveyed from the City to the CRA. The CRA is looking at redevelopment potential for the lots.

FXE Fuel Spill Regulatory Assistance: Due to damage to an aircraft fuel tank caused by a low speed collision between two airplanes at Fort Lauderdale Executive Airport, a jet fuel discharge occurred and was reported to EPGMD. Immediately after the incident, staff employed emergency procedures and properly managed the spill. RES was initially called in to conduct soil testing to determine if the soils in the area were impacted with jet fuel. Upon RES' review of the documentation, it was determined that the discharge had been sufficiently managed and that the activities should not require soil assessment or a formal discharge report, which would trigger a requirement to conduct a Site Assessment. RES provided documentation and communications sufficient for EPGMD to conclude that the reported discharge did not require further assessment and remediation.

Fort Lauderdale Low Level Bridges: RES provided asbestos surveys in anticipation of demolition and reconstruction of three low level neighborhood bridges for the City. The survey reports for the Harborage, Marcetta River, and Carlotta River met the requirements for FDOT to provide funding for the projects.

Fire Station #46: RES was contracted by the City to provide an indoor air quality survey to evaluate comfort-related issues posed by building occupants regarding indoor air quality. The scope of services included a walkthrough of the building; interviews with building occupants; observations of the air conditioning systems; measurements for temperature, relative humidity, carbon monoxide, and carbon dioxide in each building area; and moisture readings in areas where either visible indications of moisture impact were noted or that were reported by building occupants.

HUD National Environmental Policy Act (NEPA) Documentation and Area-wide Floodplain Management Eight-Step Decision-Making Process: To enhance the quality of life in our neighborhoods, the Fort Lauderdale City Commission has established four Community Investment Programs: the Neighborhood Community Investment Program, the Neighborhood Community Investment Grant Program, the Business Community Investment Program, and the Business Community Investment Grant Program. The goal of these programs is to provide matching grant funds for the construction of community improvements in the City's rights-of-way that beautify neighborhoods and enhance the quality of life for those who live, work, and visit the City of Fort Lauderdale. The majority of individual actions considered for these projects include the following: street name decorative posts, entryway monuments, entryway signs, concrete curbing, swales, sidewalks, median islands, decorative lighting, solar decorative lighting, landscape lighting, trees, landscaping, and irrigation. RES has prepared numerous environmental documentation packages to support HUD funding for the City of Fort Lauderdale's neighborhood improvement projects. The majority of these involved the preparation of Statutory Worksheets in compliance with HUD regulations. RES also prepared an Area-wide Floodplain Management Eight-Step Decision-Making Process for them to utilize when projects are located within a 100-year floodplain as defined by the Federal Emergency Management Agency (FEMA).

Benthic Surveys for Sylvan Lake Canal and Seminole River Canal: RES conducted benthic resources surveys to support dredging projects in two City-maintained waterways. RES' biologists snorkeled each site to observe the presence of regulated benthic resources (i.e. seagrasses, corals, etc.) RES' staff provided the reports to accompany their permit applications.

South Middle River Improvement Environmental Evaluation: RES completed an environmental assessment of the project area to satisfy HUD financial support for paving and drainage improvements along a section of the South Middle River neighborhood. RES completed an Environmental Review and completed the Statutory Worksheet for HUD projects Categorically Excluded per 24 CFR Part 58.25(a) to determine whether or not the project will have a significant impact on the environment. The Worksheet includes an environmental assessment of potential impacts to historic properties, floodplain management, wetland protection, coastal zone management, sole source aquifers, endangered species, Wild and Scenic Rivers, air quality, farmlands, environmental justice, noise abatement, explosives and flammables, toxic and radioactive chemicals and airport clear zones. The results of the evaluation determined that the project was not categorically



excluded and required completion of the NEPA Environmental Assessment Checklist, revising the Statutory Worksheet in the Environmental Assessment Worksheet format, and a FONSI to satisfy HUD financial support. In addition, RES had previously completed the Eight-Step Decision Making Process for Floodplain Management for the project area, which was included as part of the documentation. The Eight-Step Decision Making Process is completed in order to evaluate compliance for Projects located within a floodplain or within a designated wetland. In this case, it was triggered by the location of the project within a floodplain and included public notice, evaluation of practicable alternative locations, identification of potential direct and indirect impacts, evaluated minimization of impacts and restoration and preservation of beneficial values of the floodplain.

Grace Community Development Environmental Assessment: RES was contracted to perform a HUD Environmental Review for an industrial property that was proposed to be redeveloped as a community center. The preparation of this worksheet required coordination with environmental regulatory agencies, including the SHPO, FDEP, and EPA. Based on the proposed change in use of the property, it was determined that the project did not qualify as a Categorical Exclusion and required a higher level of review. Therefore, RES completed an Environmental Assessment and completion of the HUD's NEPA Environmental Assessment Checklist, including an alternatives analysis, and the Environmental Assessment Worksheet to comply with federal laws and authorities.

Statutory Worksheet – Community Redevelopment Agency Resurfacing Projects: The City required an environmental evaluation of the project area to satisfy HUD requirements for providing financial support for resurfacing streets within the Fort Lauderdale CRA boundary. The approximate area of the project encompassed approximately 1,400 acres. The scope of our services included the preparation of an Environmental Review to comply with federal laws and authorities that would apply to HUD under the NEPA. The City had previously submitted an Area-wide Floodplain Management Eight-Step Decision-Making Process to HUD for projects of similar nature and scope that are eligible for CDBG funds. However, this particular activity (resurfacing) was not contemplated by the City at the time of the preparation of the Area-wide Floodplain Management Eight-Step Decision Making Process documentation. Based upon our review of FEMA maps, the projects contemplated under this environmental review included areas within the floodplain requiring that the City evaluate the project in those areas in accordance with the citywide process. RES performed a review of the CRA area and review of internal and public documents to evaluate existing environmental conditions as they relate to HUD regulations within the CRA and potential for impacts. The final deliverable was a Statutory Worksheet with the supporting documentation verifying compliance.



Environmental Engineering Continuing Services Overview

City of Miami Beach | Miami Beach, Miami-Dade County, FL

RES was awarded a contract with the City of Miami Beach (the City) to conduct environmental / coastal engineering services. The following provides an overview of some of the services we have provided.



Groundwater Elevation Monitoring and Mapping Support, Sunset Harbor: RES assisted the City with the completion of a groundwater elevation monitoring study in the Sunset Harbor neighborhood. This study was conducted by the City to evaluate the soil storage capacity within this area to support the design and installation of a stormwater management system.

RES provided the City with training and support during installation of the equipment and data collection, data management and modeling efforts. The City successfully installed equipment and downloaded data with the assistance of RES personnel.

Marine Patrol Dock Repair Environmental Permitting: The City contracted with RES to provide environmental permitting support services for repair of the docks used by the City's Marine Patrol. The project involved spall and crack repair of the pile caps and repair or in-kind replacement of the concrete decking. The docks are located in Maurice Gibb Memorial Park and include an additional dock and boat ramp available to the public. RES acquired a Nationwide Permit from the USACE, a permit exemption letter from the FDEP and a Class I Coastal Construction Permit from Miami-Dade County Department of Regulatory and Economic Resources (RER). We also assisted the City with pre-construction notices to the regulatory agencies.



Sea Level Rise Evaluation: RES was engaged by the City to evaluate areas within the City in anticipation of sea level rise. The purpose of the study was to evaluate low-lying areas vulnerable to flooding and sea level rise within Miami Beach based on the assumption that the groundwater levels are tidally influenced and therefore flooding may also be influenced or exacerbated

by tidal fluctuations. These areas were identified as areas with limited soil storage capacity and where sea level rise is expected to further reduce the soil storage capacity. To accomplish this, RES monitored groundwater elevations, tidal elevation and rainfall data over a period of twelve months. As part of this study, groundwater levels were compared to tidal conditions to evaluate the correlation between fluctuations in mean tide and mean high water. The data collected was used in conjunction with Light Detection and Ranging (LiDAR) topography to model vulnerability and provide valuable information to assist on future infrastructure planning for the City.

The RES team (including Florida Atlantic University) developed a Soil Capacity Model intended to help identify areas of potential short- and long-term flooding and areas where sea level rise is expected to reduce unsaturated soil storage capacity further. The results of this model were contoured to provide a spatial representation of flood prone areas.

RES submitted a report to the City presenting our methodology, the results of the study in narrative, charts and graphics, and recommendations RES presented interim findings of this study at the Water Symposium held by the South Florida Association of Environmental Professionals as part of a presentation titled "Integrating Engineering and Environmental

AT A GLANCE.

Client Contact

Samantha Tiffany
Environmental Resources Manager
1700 Convention Center Drive
3rd Floor
Miami Beach, Florida 33139
(305) 673-7000 Ext. 26032 |
SamanthaTiffany@miamibeachfl.gov

Contract Value

\$1,943,126

Contract Period

August 2011 – Ongoing

Project Type

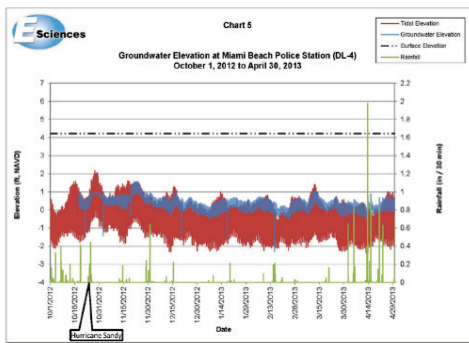
Advisory Services

Project Highlights

- Groundwater Monitoring and Mapping
- Sea Level Rise Evaluation
- Spill Prevention Control and Countermeasure (SPCC) Plans
- Environmental Engineering Controls
- Environmental Site Assessments
- Tree Inventories
- Greenspace Canopy Assessment
- Mooring Field Feasibility Study
- Seawall Permitting
- Benthic Surveys and Reporting
- Water Quality Sampling Monitoring
- Water Bacteria Sampling

Key Staff

- Nadia Locke, PE, LEED AP
- Kathryn Eisnor, LEP
- Mark Clark, CEP
- Gayle Stone, MS



Strategies to Mitigate for, and Adapt to, Climate Change Impacts to Coastal Urban Communities.” We were also requested to be a collaborator and advisor on a research project titled Environmental Finance and Risk Management for Coastal Urban Resilience: Sustainability in South Florida Through Investment-Driven Ecology with the University of Miami, Florida State University, Florida International University and the University of Hawaii.

Since the completion of this city-wide study, the City engaged RES in the evaluation of groundwater elevation trends in the Sunset Harbor neighborhood. RES provided technical training and support to the City on equipment installation and maintenance, data download and evaluation, and modeling efforts.

Spill Prevention Control and Countermeasure (SPCC) Plans: RES prepared SPCC Plans for 12 facilities located throughout Miami Beach. These facilities included pump stations, fire stations, public works yard, Miami Beach Golf Club and the Convention Center. RES’ approach for developing the SPCC Plan(s) followed the steps outlined in applicable federal regulations (40 CFR 112). The Plans were reviewed and certified by a RES Professional Engineer. We incorporated provisions to assist the City with compliance with state and local regulations.

Green Waste Facility: This site was an undeveloped, bermed area located on the east side of the Miami Beach Golf Club that was used for solid waste management, and a portion of the area contained buried debris. In anticipation of constructing a wastewater reclamation facility, the City implemented a material screening plan to remove the buried solid waste and screen out the larger pieces of solid waste for off-site disposal. The recovered screened material (RSM) was merged with a berm around the solid waste handling area to separate it from adjacent properties and the golf course. Miami-Dade County Department of RER required the City to demonstrate the top two feet could be considered to be clean fill or an EC covering areas of buried solid waste and RSM.



RES conducted assessed the top two feet of soil layer covering the berm. In order to complete the project in a time and cost-effective manner, RES developed a phased sampling approach by collecting the necessary samples but conducting laboratory analysis on an iterative basis. The initial sampling results revealed the presence of regulated contaminants above regulatory criteria; therefore additional analysis was not deemed necessary. The City elected to implement an EC to achieve conditional site closure along with the adjacent golf course property, protecting human health and the environment. RES prepared an EC design and provided oversight and regulatory coordination for the installation of the EC. The design and installation of the EC received regulatory approval, and RES assisted with drafting the restrictive covenant to be used for the final conditional closure.



Fleet Management Facility: RES conducted groundwater and soil assessment activities at the active City’s fleet management facility. The assessment was completed in order to evaluate the presence of contamination associated with a historical petroleum discharge documented in 1992. This assessment revealed the presence of free-floating product on the groundwater and soil impacts within a localized area at the facility. RES prepared and submitted a Site Assessment Report Addendum (SARA) including source removal plan recommendations. The SARA and source removal plan have received regulatory approval from RER. RES has recently prepared a Monitoring Only Plan (MOP) as part of a Consent Agreement between RER and the City to maintain certain environmental provisions on the site while waiting to implement cleanup and remediation efforts during the anticipated development of the property. The MOP was approved by RER and RES is conducting periodic removal of free product and groundwater monitoring.

Street Tree Inventory: Between 2013 to 2022, RES conducted six phases of street tree inventories. During these phases, more than 49,000 trees were inventoried using sub-meter accurate global positioning equipment. RES provided the City with an ESRI ArcGIS shape file. The work included assessing each tree for its general condition and providing recommendations for maintenance. Since 2020, RES has inventoried another 25,500 trees in the City.



Greenspace Canopy Assessment: Using i-Tree Canopy and i-Tree Vue, RES assessed the extent of the City's urban forest canopy and the ecological services provided by the trees. RES estimated the canopy coverage for the City's entire urban forest, its parks and its rights of way using i-Tree Canopy. It also estimated the percentage of available space remaining within the City for additional tree planting. RES used this information to estimate the carbon sequestration and storage, as well as pollutant removal being provided by the trees. RES developed a brochure for public education documenting the information from the study.

Miami Beach Convention Center (MBCC) Brownfield: In preparation for redevelopment of City owned properties to enhance the convention center area, RES conducted a Phase I ESA for land parcels adjacent to the MBCC. These parcels included a parking lot west of the convention center, the 21st Street Community Center and Bandshell north of the convention center and the Fillmore Theatre. The Phase I ESA revealed the operation of a historic golf course on the project sites. This finding was identified as a recognized environmental condition (REC) based on the potential historical application of herbicides and pesticides on the ground. A Phase II ESA was conducted by RES to evaluate the potential presence of soil and groundwater impacts based on the historical use of the sites. Incremental Sampling Methodology (ISM) was selected as the soil sampling approach. ISM results were indicative of the presence of arsenic concentrations above approved naturally occurring concentration criteria specific for Miami Beach. Limited groundwater impacts were detected in one area. RES assisted the City in evaluating a viable development approach to address the onsite impacts. The MBCC site and adjacent City-owned parcels have been designated under a Brownfield Site Rehabilitation Agreement. RES is currently implementing an area wide assessment and regulatory closure strategy of the golf course that incorporates the MBCC and multiple adjacent sites. Based on the extent and complexity of the assessment, RES prepared a Sampling Plan that has been approved by the Miami-Dade RER in order to gain their approval prior to conducting extensive and intensive assessment activities in this busy area of the City. RES is currently conducting the site assessment.

Proposed Miami Beach Convention Center Headquarter Hotel Assessment: RES conducted a limited site assessment for a site including a portion of the Fillmore Theater and parking areas adjacent to the Convention Center. This assessment was conducted to assess contamination from a historic golf course discovered during a Phase I ESAs conducted by RES for adjacent properties. The assessment included soil and groundwater sampling and confirmed the presence of localized soil arsenic impacts and the presence of nitrate concentrations above groundwater cleanup criteria.

Carl Fisher Seawall State Permitting Support: The Carl Fisher Clubhouse was constructed in 1916 and is the oldest public standing structure in Miami Beach. It is on the National Register of Historic Places and is a locally designated historic structure. As part of the restoration of the Clubhouse, and to protect this historic resource, the City also needed to repair the seawall on Collins Canal, which was severely deteriorated. Mangroves had recruited to the area. RES performed a field assessment with the South Florida Water Management District (SFWMD), performed an impact evaluation and functional assessment of the mangroves and acquired the Environmental Resource Permit from SFWMD. Permitting required coordination with the State Division of Historical Resources and reservation of saltwater mitigation credits from the Everglades Mitigation Bank.

Baywalk, Environmental Engineering Continuing Services: The City's vision for a Baywalk is a system of public pedestrian pathways along the Biscayne Bay shoreline designed to promote alternative transportation. Once completed, it will provide a continuous path running north/south on the rear of the properties along West Avenue from 5th Street to Lincoln Road, linking residential and commercial areas, public street-end parks, and other existing pedestrian and bicycle facilities such as the beachwalk. The Baywalk system is part of the larger Atlantic Greenway Network as well as a component of the Blueways Master Plan and the Bicycle Pedestrian Master Plan. RES permitted the first overwater portion of the Baywalk and conducted feasibility studies for three additional overwater sections.

The tables below summarize the ecological/inventory benefits of the existing canopy and Plantable Greenspace areas of the City parks, City property, and the existing canopy of the entire City.

Attribute	Existing Canopy (100% cover)	Plantable Greenspace*
Annual Carbon Sequestration (short tons/yr value)	3,812	303,579
Total Carbon Storage (short tons/yr value)	83,617	56,368,289
Total Pollutant Removal** (pounds/yr value)	75,801	5,022,673

City Properties

Attribute	Existing Canopy (100% cover)	Plantable Greenspace*
Annual Carbon Sequestration (short tons/yr value)	1,138	1,401
Total Carbon Storage (short tons/yr value)	\$2,609	\$1,006
Total Pollutant Removal** (pounds/yr value)	22,046	37,240

City Parks

Attribute	Existing Canopy (100% cover)	Plantable Greenspace*
Annual Carbon Sequestration (short tons/yr value)	246	306
Total Carbon Storage (short tons/yr value)	50,791	56,892
Total Pollutant Removal** (pounds/yr value)	18,322	15,719

As the table indicates, ecological services and monetary benefits may be realized through the installation of trees on Plantable Greenspace areas within City parks and City property in general.

Urban Canopy Structure

The City's urban canopy is comprised of a variety of palm species (e.g. cabbage palm, coconut palm, royal palm), native trees (e.g. live oak, seagrape, mahogany, pigeon plum) and exotic trees (e.g. royal poinciana, Brazilian beautyleaf, Australian pine). These trees provide ecosystem services to the City such as carbon sequestration, pollutant removal, cooling, and erosion control. The City should maintain its existing tree canopy and seek opportunities to plant additional trees within Plantable Greenspace areas on City properties. It should also encourage tree plantings on private properties. This can be done using incentives such as tree give-away programs.

E Sciences

E Sciences, Incorporated
 111 NE 1st Street, Suite 506
 Miami, FL 33132
 Phone: 786/517-2632
 Fax: 305/397-4556
www.esciencesinc.com



RES obtained FDEP and USACE authorizations to construction the Baywalk section from 10th Street to 12th Street, a length of approximately 1,000 linear feet. The feasibility studies were conducted for sections from north of 7th Street to 10th Street and from north of 12th Street to 13th Street.

RES performed benthic resources surveys and prepared environmental summary reports for each of these projects. The benthic surveys were performed by laying a tape measure parallel to the seawall and performing transects perpendicular to the seawall. The distance to the beginning of a seagrass bed was measured from the seawall with a second tape measure. Information regarding seagrass species and density of each species was recorded. Several species of seagrass were present in the project area. Most seagrass beds continued beyond the 40-foot survey limits. Coral species and incidental observations of aquatic wildlife were also recorded.

Our reports included the methods and findings of the benthic resources survey. The reports include maps and an analysis of potential impacts to protected species as required by the regulatory agencies. The feasibility studies included concept drawings and opinions on probable costs.

Normandy Shores Golf Course Groundwater Monitoring: RES was engaged by the City of Miami Beach to implement the required groundwater monitoring based on the documented presence of arsenic impacts at the Normandy Shores Golf Course. The groundwater monitoring program has been modified over the years based on the data compiled. The goal of the monitoring program is to demonstrate that the arsenic groundwater plume is stable and contained within the site boundaries.

10th Street Terminus Water Quality Sampling: RES conducted water quality monitoring in the bay at the end of 10th Street in Miami Beach. The request from the City was based upon a response to a resident's reported observation of "oil, debris and sewage" into the bay emanating from a culvert in the seawall. The resident posted photographs showing a dark area in the water on social media. It was also noted that roadway construction was on-going in the area and that there was a turbidity curtain in the water in this location. The City engaged RES to collect water quality samples and review activities in the area to document if residual impacts from the alleged discharge exist in this area.

Emergency Surface Water Bacteria Sampling: RES was requested by the City of Miami Beach to collect surface water samples on an emergency basis evaluate the presence of enterococci and fecal coliform as a result of sanitary sewer leaks. RES collected samples and submitted them to Miami-Dade County's laboratory for analysis. Work was conducted on an expedited basis to comply with regulatory requirements.

Miami Beach Mooring Field: The City is a popular destination for boaters and has observed an increase in demand for local anchorage in Sunset Harbour. Sunset Harbour is located within Biscayne Bay, an Outstanding Florida Water. The City recognizes that the increase in density of unregulated anchoring of vessels in this area over time is unsustainable. The continued anchoring of vessels can cause navigational/safety hazards and impact natural resources such as seagrass beds and water quality. The City elected to take a proactive approach to managing this issue.



The Mayor and City Commission adopted a resolution to explore the establishment of a public mooring field in the vicinity of Sunset Harbour. The City retained the consulting team of RES and Moffatt & Nichol, to evaluate the steps necessary to establish a managed mooring field and to guide the City through the regulatory permitting process. We prepared an initial study that included an assessment of the needs, outlined the benefits and the regulatory requirements, explored the physical extent of a viable area west of Maurice Gibb Memorial Park, provided example layout concepts, and presented requirements for upland support facilities and explored management options. This information was compiled to provide a basis to inform initial discussions with the public, City staff and officials. RES supported the City in subsequent planning to develop schedules and opinion of probable costs as well as holding several regulatory agency meetings and supported City staff in meetings with elected officials, advisory committees and the public.

Under our current task order, we are designing and permitting the mooring field. This undertaking involves stakeholder outreach in addition to the technical and regulatory aspects of the project. We have supported the City in meetings with a variety of stakeholders including residents, the boating community and businesses and in responding to community questions and concerns. We have met with the Miami Beach Boater's Association, Marine and Waterfront Protection Authority, condominium associations, and held general public meetings in person and on virtual platforms.



Collins Park Garage Brownfield Site: RES has been assisting the City on this site since 2020 to obtain regulatory closure. This site formerly housed the Montero Chevron #47617) and had underground storage tanks at the property that contained both gasoline and diesel. A discharge was reported in 1989, and site assessment and remediation were completed by others from that time until the City purchased the property in 2015. The City executed a Brownfield Site Rehabilitation Agreement (BRSA) in 2018 for the site. The construction of the now existing parking garage began in 2018, and tanks were removed. Additional contamination was found at the site following the removal of the tanks. Since the completion of construction RES has been working with the City, obtaining ROW permits, installing groundwater monitoring wells for off-site delineation of contamination, sampling groundwater wells and completing reporting. The site is nearing the completion stage and RES is requesting an RMO III closure for the Site.

Former Par 3 Golf Course: This site is located adjacent to the Miami Beach Golf Course. The Former Par 3 is being redeveloped into a park for the community with opening scheduled for fall of 2025. Groundwater assessment activities at the site started in 2021. Arsenic was found to be present in the groundwater. RES installed monitoring wells and conducted groundwater sampling on the property. It was found that the groundwater contamination has gone off site. RES obtained ROW permits as well as permits from the Miami-Dade County School District to install and sample wells in the surrounding area around the former golf course. Assessment is still ongoing to delineate the arsenic plume.

Outfall Sampling: The City was working on closing out Class II permits for five different outfall locations, located throughout the City. Miami-Dade Department of Environmental Resources Management (DERM) issued a letter that required sampling to be completed at the outfall prior to them issuing permit closure. Samples were to be collected at the point of discharge and at the structure immediately upstream of the outfall and would be collected during the rainy season (after May 1st) at the first rainfall of more than 0.5 inches and at the next rainfall that was greater than 0.5 inches. Samples were collected from the structures at those times at all five of the outfalls, and reports were submitted to DERM for approval.

West Avenue Sewer Extension: The City installed sewer main extensions at five locations within the City in 2016. As part of the permit closeouts for those installations, DERM requested that sampling be completed in both the wet and dry seasons for the following parameters: biological oxygen demand, total nitrogen, total phosphorous, Escherichia coli (E. coli), Enterococcus, caffeine, sucralose, and acetaminophen to determine if the extensions on the sewer lines were leaking. RES obtained ROW permitting the site to include direct push sampling near the extension pipes to sample. RES mobilized to the site on two different occasions to collect the samples. Data collected from the sewer extension areas in both the wet and dry season and there was no strong evidence to suggest that the sewer extensions were leaking.

Miami Beach Golf Course: RES assisted the City with several areas of the golf course: The Green Waste area, the Maintenance Facility area as well as the actual golf course area. The Maintenance Facility area had been assessed since the 1990s for arsenic and pesticide contamination in both soil and groundwater. RES implemented source removal and oversaw the installation of an engineering control to prepare for conditional closure of that area. The Green Waste area has been assessed since buried debris was found in 2002. Soil and groundwater assessment was completed, and contamination impacts were addressed by us of an engineering control to prepare for a conditional closure. RES conducted soil sampling throughout the golf course area. A source removal plan for the removal of "hot spots" within the golf course in 2022. DERM responded to that source removal plan in 2025 and wanted additional sampling to be conducted. RES is working with the City to get the requested sampling completed.



Districtwide NPDES Permit Compliance Contract

Florida Department of Transportation District Four | Broward, Indian River, Martin, Palm Beach, and St. Lucie Counties, FL

RES is employed by the FDOT District Four to provide NPDES permit implementation and compliance services. FDOT District Four is located in South Florida and includes five counties: Broward, Palm Beach, Martin, St. Lucie and Indian River. The NPDES program throughout the United States. divides the program into either Phase I – areas with large MS4s, generally serving populations of over 100,000, and Phase II – MS4s serving populations under 100,000. District Four has both Phase I areas (Broward and Palm Beach Counties) and Phase II areas (Martin, St. Lucie and Indian River Counties – collectively known as the Treasure Coast).

Services provided by RES include preparation and submittal of Annual Reports to the FDEP each year for Phase I permits (Broward and Palm Beach Counties) and alternate years for Phase II (Treasure Coast); inspections of over 4,000 stormwater facilities and over 600 outfalls; annual inspections of the three FDOT maintenance yards; providing illicit discharge detect and elimination (IDDE) support, Spill Prevention, and Construction Site Erosion Control training to FDOT maintenance employee; and providing miscellaneous support such as investigating IDDE reports and representing FDOT at NPDES meetings. RES has implemented numerous innovative tools to reduce inspection costs such as using tablets in the field to instantaneously generate reports and closely tracking maintenance trends to reduce inspection frequencies.

Our services also include maintaining and updating the FDOT Geographic Information System (GIS) database using two major sources of data: coordinating with Construction to obtain information about new facilities; and georeferencing the state road system using existing as-built plans that RES download directly from FDOT’s GIS database, scan, digitize, prepare attribute tables and submit to FDOT’s GIS department.

Beginning in 2010, several TMDLs were adopted by the FDEP in District Four, two of which proceeded to the Basin Management Action Plan (BMAP) phase: the Central Indian River Lagoon and St. Lucie Estuary TMDLs. RES provides key technical support to FDOT for the TMDL program including representing FDOT at BMAP meetings, preparing basin GIS layers for submittal to FDEP, compiling treatment inventory, calculating pollution loads and pollution load reductions, assessing the FDEP TMDL models, and preparing Annual Progress Reports.

In 2011, FDEP issued the new Third Term NPDES MS4 Permits, which included requirements for proactively addressing TMDLs. In Broward County there were two



Outfalls to swale along interstate

new TMDLs: Pompano Canal (nutrient TMDL) and North Fork Snake Creek (WBID 3279A, bacteria TMDL). RES provided technical data and senior review of the Monitoring Report for the Pompano Canal TMDL, which was successfully “de-listed”. For WBID 3279A RES developed a Walk the Roadway protocol accepted by FDEP for the single FDOT road in the WBID. FDEP approved FDOT’s BPCP with no comments; it is noted that it was the first BPCP to be approved by FDEP.

AT A GLANCE.

Client Contact

Ms. Ivette Leiva
3400 West Commercial Boulevard
Fort Lauderdale, FL 33309
Ivette.Leiva@dot.state.fl.us |
954.777.4221

Contract Value

\$4,500,000

Project Size

Districtwide

Contract Period

June 2008 – Ongoing

Project Type

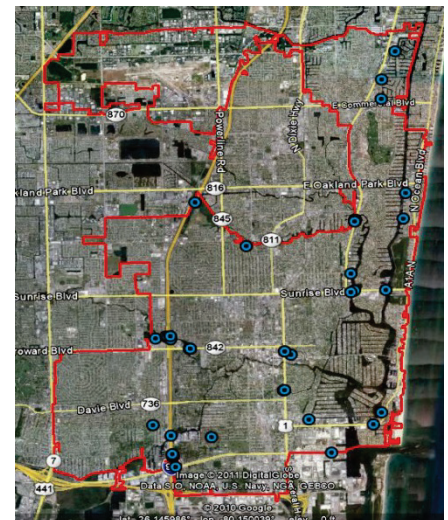
Advisory Services

Project Highlights

- NPDES Permit Implementation
- NPDES Compliance Services
- FDOT GIS Database
- Inspections

Key Staff

- Rachel Vitek
- Jana Ash



This aerial shows outfalls in Fort Lauderdale inspected by RES staff



With issuance of the new Fourth Term NPDES MS4 permit in January 2018, Broward County has 11 bacteria TMDLs and Palm Beach County three TMDLs to be addressed. RES is working closely with FDOT to meet the permit requirements for prioritized TMDLs as well as assist other co-permittees on FDOT's behalf as requested. The first steps for the prioritized TMDLs (one in each county) was to georeference the entire stormwater system, map the drainage basins, coordinate with the maintenance staff for maintenance records, review land uses adjacent to FDOT's ROW, and calculate pollutant loads. The next steps are to team with stakeholders to map and perform field reconnaissance on areas of concern. The final step will be to compile the information into a BPCP.



Outfall to stormwater pond

Also new with the Fourth Term NPDES MS4 permit, FDEP is requiring all permittees submit individual Assessment Programs to assess whether the Stormwater Management Plans each co-permittee developed are effective, based on monitoring data and/or pollutant loading.

The City of Fort Lauderdale is considered a co-permittee on the FDOT MS4 Permit. RES assisted several municipalities, including the City of Fort Lauderdale and the FDOT prepare their Assessment Program. The City of Fort Lauderdale's and FDOT's Assessment Programs were approved with no comments.



Drainage swale along interstate



Drainage swale and control structure



Southwest Ranches Continuing NPDES Services

Town of Southwest Ranches | Southwest Ranches, Broward County, FL



RES assists the Town of Southwest Ranches (Town) with implementation of the Town’s NPDES MS4 permit. Various tasks during Cycles 3 and 4 of this permit for which RES has provided assistance include: developing protocols for documenting NPDES permit activities; preparing NPDES Annual Reports for submittal to the FDEP, preparing for FDEP NPDES permit audits, and preparing and implementing the BPCP as required for water bodies with a Total Maximum Daily Load for bacteria pollution. For the BPCP, RES coordinates, schedules, and leads

meetings (ex: Kick-off meeting; Maps on the Table meeting) and field events (ex: Walk the Waterbody event). Once the events are completed, RES prepares the BPCP document and assists with FDEP’s Requests for Additional Information as needed. RES completed this task during the Cycle 3 permit for WBID 3279 A, and is currently assisting the Town, along with a neighboring stakeholder, in the preparation of the BPCP for 3279. Other tasks provided by RES includes attending Broward County committee meetings, FDEP Phase I Teleconferences, GIS services, and ecological services as requested.

As a result of RES’ expertise assisting clients implement their NPDES MS4 permit, we understand the importance of good communication, documentation and quality assurance. RES works closely with Town staff to gather and review NPDES data, provides recommendations, prepares draft reports for the Town’s review and input, finalizes reports and submits along with backup documentation to the Town in both hard and electronic copy, and meets regularly with Town staff to review their Stormwater Management Program and update as needed to meet NPDES MS4 permit requirements.

AT A GLANCE.

Client Contact

Emily McCord
13400 Griffin Road
Southwest Ranches, Florida 33330
954.343.7453 |
emccord@swranches.org

Contract Value

\$95,300

Project Size

Townwide

Contract Period

February 2014 – Present

Project Type

Advisory Services

Project Highlights

- NPDES Services
- MS4 Permitting
- NPDES Annual Reports
- NPDES Permit Audits
- BPCP Plans
- Agency Meeting Attendance

Key Staff

- Rachel Vitek, MS, GISP



Environmental Services Overview

Village of Islands, Islamorada | Islamorada, Monroe County, FL

RES has provided a variety of environmental engineering consulting services for Islamorada, Village of Islands, (the Village or Islamorada) including the following:

Interim Public Works Director: During transition between Village Public Works Directors, RES was requested to fulfill the duties of the director on an interim basis. The transition took place during a critical phase of infrastructure growth — the Village was constructing its first wastewater treatment plant and collection system. RES' role involved managing and overseeing multiple functions related to public works projects, including stormwater, wastewater and other capital improvement projects.

Wastewater Treatment Alternatives Analysis: RES prepared a feasibility study and cost comparison to assist Islamorada in deciding whether to treat wastewater on-island or send all or a portion of it to a consolidated plant being constructed in Key Largo for treatment. This study involved a conceptual design of a transmission system from Key Largo to Islamorada, including all related wastewater facilities. We estimated capital and operational costs for four on-site wastewater treatment plants as well as a conveyance system to Key Largo's plant. Costs for the various scenarios were compiled and summarized to provide five alternatives for consideration. Additional considerations included construction and hook-up phasing, legal issues, environmental considerations, aesthetics, limited land availability, and legal issues. RES met with the Village's Water Quality Improvement Citizens' Advisory Committee and presented the findings to the Village Council.

Wastewater Master Plan Due Diligence and Regulatory Compliance Assessment: RES projected probable demand for reuse water, evaluated a full service package wastewater treatment facility scenario, and assessed comparative mass nutrient loading and regulatory compliance issues. A regulatory compliance assessment was also performed which assessed (based on actual performance data of existing facilities currently operating in the Village) the reliability of producing compliant wastewater treatment effluent if a complete network of package wastewater treatment facilities were constructed. FDEP data records were reviewed regarding the compliance history of package wastewater treatment facilities currently operating within the Village.

Request for Proposals Development and Wastewater Rate Study: RES prepared a Request for Proposal (RFP) for the design, construction and implementation of a wastewater treatment facility and collection system to serve North Plantation Key. RES assisted the Village with securing a design/build team for Phase I North Plantation Key/North Plantation Key Colony Wastewater Treatment and Collection System. Staff members researched technical specifications and reviewed the Preliminary Design Report for North Plantation Key Colony/North Plantation Key Waste Water Collection System as well as the Monroe County Waste Water Master Plan to prepare the technical RFP for the Village. RES attended several meetings including Village Council Meetings, meetings with Village staff and Water Quality Committee Meetings. Staff worked closely with the water quality committee to address the communities' concerns in the RFP. RES evaluated proposals submitted by bidders and ranked firms on technical merit, and conducted interviews on behalf of the Village. We then shortlisted the bidders and conducted a second round of interviews to choose the Design/Builder. RES assisted the Village in negotiations with the potential Design/Builder and helped to secure a Design/Build Agreement.

Program Management/Plantation Key Wastewater Treatment Facility: RES provided Engineering Support Services to the Village of Islamorada for the design and construction of the North Plantation Key (NPK) wastewater treatment facility and

AT A GLANCE.

Client Contact

Peter Frezza
Islamorada, Village of Islands
86800 Overseas Highway
Islamorada, Florida 33036
305.664.6467 |
peter.frezza@islamorada.fl.us

Contract Value

\$1,090,832

Project Size

Village-wide

Contract Period

2001 – Present

Project Type

Advisory Services

Project Highlights

- Stormwater Plan Reviews
- Drainage Plan Reviews
- Construction Engineering Services
- Stormwater Land Development Regulations and Technical Manual
- Water Quality Master Plan

Key Staff

- Nadia Locke, PE, LEED AP
- James Orioles, PE
- Patrick Shearer, PE





collection system. The NPK project entailed the construction of a 0.355 MGD-MMADF wastewater treatment facility using a membrane bioreactor activated sludge biological nutrient removal treatment process. The project also includes a vacuum collection system with eight miles of vacuum sewer piping and force main. Construction of a reclaimed water system with 3.5 miles of transmission main was also part of the project. Construction was accomplished through two design/build contracts. RES' role extended throughout the project. Our initial responsibilities included the preparation of technical RFPs for the two phases of this project. During the most recent contractor selection process, RES provided two engineers to participate in the selection committee. RES negotiated with the contractor on behalf of the Village and also was a lead participant in ensuring that the Village was able to receive \$6.5 million in grant funding by contributing technical ideas and research and project management services to ensure that ambitious grant-related milestones were met. RES also supported the Village in the selection of the treatment plant Operations & Maintenance (O&M) contractor through the preparation of an RFP and participation in the selection committee. RES acted as the Village's Design Consultant during the design phase of each NPK project. In this role we performed detailed reviews of plans and specifications for compliance with the contract documents, industry standards, constructability, ease of maintenance and other issues important to our client. During the construction phase of each project we performed construction engineering and inspection services. This included reviewing



shop drawings, attending and participating in progress meetings, performing site inspections, reviewing the contractor's pay applications, evaluating change orders, oversight during the testing and acceptance phase, evaluating technical issues that arose during construction and offering solutions, and performing final inspections and developing punch lists. We also tracked the tasks required to transition from the construction phase to the operational phase and coordinated the construction and O&M contractors' activities to ensure a smooth transition

shop drawings, attending and participating in progress meetings, performing site inspections, reviewing the contractor's pay applications, evaluating change orders, oversight during the testing and acceptance phase, evaluating technical issues that arose during construction and offering solutions, and performing final inspections and developing punch lists. We also tracked the tasks required to transition from the construction phase to the operational phase and coordinated the construction and O&M contractors' activities to ensure a smooth transition

Construction Engineering Services: RES provided Construction Engineering Inspection (CEI) and engineering support services for the NPK / NPK Colony Wastewater Treatment Facility and Collection System in Islamorada, Florida. RES prepared the technical RFP for Phase I NPK Colony Waste Water Treatment Facility and Collection System and assisted the Village with securing a Design/Builder for the project. Staff served as the design consultant for the Village of Islamorada for this project. Responsibilities included plans and specifications review; shop drawing reviews; general CEI services, including on-site inspections; payment application processing; and interaction between the client and the Design/Builder. RES conducted weekly site inspections and attended monthly progress meetings. These tasks also included negotiating a change order to expand the waste water treatment facility from a 0.1 MGD-AADF facility to the current 0.25 MGD-AADF facility.

Indian Key Fill Bike Path/Stormwater Demonstration: This project was a first year implementation project under the Village's Stormwater Master Plan. The project is located on a one mile long, narrow strip of land known as Indian Key Fill, which is bordered by Florida Bay on the west and the Atlantic Ocean on the east. In this area, these two water bodies are Outstanding Florida Waters and are part of the Florida Keys National Marine Sanctuary.

Indian Key fill is dissected by the Florida Keys major road artery, US 1, on either side of which was a sparsely vegetated, linear bike path that was on grade with the slope from the highway. The combination of the slope and sparse vegetation allowed stormwater to runoff almost unimpeded into the adjacent bay and the ocean. The goal of the project was to pre-treat stormwater runoff along the one-mile stretch to improve water quality and minimize pollutants discharging into Florida Bay and the Atlantic Ocean. The first step in the project was to demolish the old bike path. The area was then re-graded, and a new, meandering bike path with swales was constructed on both sides of US 1. The final step was to install xeriscape landscaping using native plants. The result of the project was to provide water detention for the stormwater that allowed percolation and biofiltering prior to discharging into the adjacent water bodies. Additional benefits include enhanced areas for native wildlife and added recreational open space for residents and visitors.



RES services included assistance with negotiations with regulatory agencies and permitting, CEI, RFP bid evaluation, biological survey, wetland delineation, and turbidity reports.



Indian Key Fill Oceanside Restoration Demonstration: Islamorada required wetland delineation and habitat impact assessment during the reconstruction of a bike path along the Oceanside of US 1. The project was initiated after the SFWMD notified Islamorada of incidental fill being placed into wetlands otherwise identified as non-disturbance areas. RES identified all unauthorized wetland fill areas and prepared a restoration plan and delivered the product to Islamorada and the SFWMD within two weeks of being notified of the problem. RES also coordinated the field supervision during the restoration activities.

Stormwater Land Development Regulations and Technical Manual: RES assisted Islamorada in developing land development regulations in regard to stormwater impacts during development/redevelopment within the Village. Services included compiling data related to existing stormwater systems within the Village and developing the language for the regulations. Areas covered in the regulation text included the development/redevelopment process and its relation to the Village's review process and adherence to existing county, water management district and state regulations. Services also included development of a matrix of alternatives related to the type of designated land use activities, as well as specific design criteria needed for each stormwater treatment facility, and development of a technical manual to assist the applicant in interpreting the regulations and specific examples.

Stormwater / Drainage Plan Reviews: RES provides ongoing support to the Village's Planning and Development Services Department by reviewing drainage plans that are submitted to the Village for development, redevelopment or modifications to existing developments. RES reviews the stormwater calculations and design to evaluate if the overall stormwater management plan is substantially consistent with the Village's stormwater management regulations and Stormwater Design Criteria Technical Manual. Formal review letters provide the results of our review.

If revised plans are submitted based upon our review comments, RES reviews the submittals again to evaluate if the revised plans sufficiently address any noncompliance items. These reviews are often time sensitive and are regularly completed within three to five working days.

Water Quality Master Plan: The project included several tasks, the first of which was an Assessment Report that included an inventory of Village residential canals, attributes and classification using the Monroe County Residential Canal and Inventory report. This was supplemented with Village water quality monitoring data and, using this data, a recommendation for suitable canals for the water quality project with the funds available was provided. Once a decision was made regarding the canal and treatment technology, drawings were generated to prepare a bid package, permit applications.

Stormwater Technical Manual: RES prepared a Stormwater Technical Manual for the Village in order for them to provide guidance to engineers and developers that are preparing stormwater management plans for site development within the Village. The manual outlined the Village requirements and provided forms to streamline the review process for simple projects. In 2014, RES updated this manual to incorporate modern technologies and stormwater management practices to promote design and development using technologies are more sustainable and applicable to the uniqueness of the Village.

Stormwater Plan Reviews: The Village provides RES with stormwater management plans for new developments and redevelopments that are submitted to planning and zoning. RES reviews the plans for consistency with the Village's ordinances, land development regulations and Stormwater Technical Manual. Review letters providing our opinions and requests for additional information, if appropriate, are provided at the conclusion of the reviews. Reviews are typically completed within three to five days.



SR-9/I-95 Express Lanes and Ramp Signals Phase 3A-1 and Phase 3C, Broward County, Florida

BCC Engineering | FDOT District Four, City of Fort Lauderdale, Broward County, FL



RES has provided environmental support as part of the design build team for two phases of the I-95 Express Lanes for FDOT District Four.

Phase 3A-1 extended the existing express lanes north from just south of Broward Boulevard to just north of Commercial Boulevard in Broward County. One lane was added, and the High Occupancy Vehicle Lane was converted to create two express lanes in each direction. The project included ramp signalization from Hallandale Beach Boulevard to Commercial Boulevard. Other work included installing Intelligent Transportation System and tolling equipment, widening bridges, and installing noise barriers. This was an approximately 6.6 mile and \$149 million project that began construction in mid-2016 and was completed in 2023.



Phase 3C is an 11-mile project that includes I-95 from south of Hollywood Boulevard to South of Broward Boulevard and I-595 from west of SR-7 to I-95. This \$457 million design build project includes connection of express lanes between I-95 and I-595, adding additional lanes and exit ramps, turn lane improvements, widening and drainage improvements. Construction began in 2019 and is expected to be completed in 2026.

For both projects, RES provides assistance with permit modifications/extensions, contamination reviews, including groundwater testing, wetland impact analysis, mitigation coordination, agency coordination and dewatering permitting.

AT A GLANCE.

Client Contact

Carlos Alcantara, PE, Senior Project Manager
BCC Engineering
4901 NW 17th Way, Suite 506
Fort Lauderdale, Florida 33309
954.298.2246|
calcantara@bcceng.com

Contract Value

\$48,125 (Phase 3A-1)
\$194,000 (Phase 3C)

Project Size

6.6 miles (Phase 3A-1)
11 miles (Phase 3C)

Contract Period

2016 – Ongoing

Project Type

Advisory Services

Project Highlights

- Permit Modifications/Extension
- Contamination Reviews
- Groundwater Testing
- Wetland Impact Analysis
- Mitigation Coordination
- Agency Coordination
- Dewatering Permitting

Key Staff

- Gayle Stone, MS
- Nadia Locke, PE, LEED AP
- Mark Clark, CEP
- Kathryn Eisnor, LEP
- Kathryn Larrison
- Junnio Freixa



Environmental Site Assessment and Remediation

Orange County | Orange County, FL



RES provides a variety of environmental services under this contract including the following:

Due Diligence for Roadway Improvement Projects: RES conducted Phase I ESAs in accordance with American Society for Testing and Materials (ASTM) E1527-21 to support County due diligence efforts associated with the purchase of lands that will be used for road improvement projects at Bates Road Bridge, Buck Road Bridge Replacement, East Bay Street, University Boulevard and Dean Road, Texas Avenue Roadway Conceptual Analysis, Richard Crotty Parkway, Ficquette Road, Avalon Road, and Reams Road. The sites consisted of undeveloped, commercial, or residential parcels. When RECs were identified, Phase II ESAs, consisting of soil and groundwater sampling were implemented.

In Place Closures: RES conducted soil and groundwater sampling and subcontractor oversight for in place UST closures at four Fire Rescue facilities and a water reclamation plant. The scope of services included sampling of soil and groundwater around the USTs and associated piping and dispensers. The abandonment activities were conducted in general accordance with Chapter 62-761 of the Florida Administrative Code (F.A.C.) and FDEP document Instructions for Conducting Sampling During Underground Storage Tank Closure dated July 2019. Following completion of the sampling activities, RES' subcontractor abandoned the USTs in place with foam and sealed the hatchways into the tanks. Closure reports, documenting the field activities and laboratory results were prepared for submittal to the FDEP.

Underground Storage Tank Removals: RES conducted soil and groundwater sampling and prepared closure documentation for UST removals at two Fire Rescue facilities and three Fleet Maintenance facilities. The scope of services included sampling of soils from the excavation pit and beneath associated piping and dispensers. Groundwater monitoring wells were then installed in the UST areas and sampled. The closure activities were conducted in general accordance with Chapter 62-761 F.A.C. and the FDEP document *Instructions for Conducting Sampling During Underground Storage Tank Closure* dated July 2019. Closure reports, documenting the field activities and laboratory results were prepared for submittal to the FDEP.

Emergency Response Services: RES provides emergency response services for Orange County Risk Management for oil spills or oil/hazardous material dumping in the Orange County ROW. Upon receiving a report of a spill or dumping, RES and our subcontractor respond to the area, assess the impact and remove the dumped or spilled material. Often laboratory waste

AT A GLANCE.

Client Contact

Tisha Pence, CHMM, CES,
Environmental Loss Prevention
Coordinator
109 E. Church Street, Suite 200,
Orlando, Florida 32801
407.836.9638 | Tisha.Pence@ocfl.net

Contract Value

\$1,500,000

Project Size

Countywide

Contract Period

2021 – 2025

Project Type

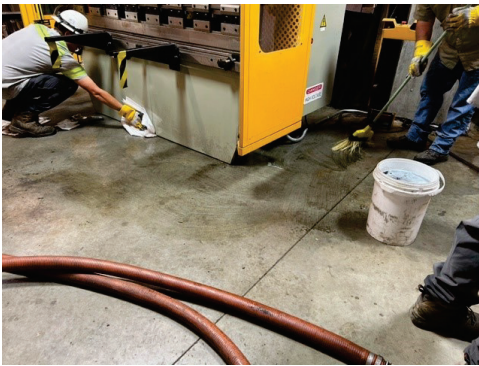
Advisory Services – Environmental
Engineering Consulting Services

Project Highlights

- Phase I and Phase II ESAs
- UST Closures
- Emergency Response
- Remedial Action Plans
- Landfill Closures

Key Staff

- Flormari Blackburn, PE
- Scott Evanson, PG
- Josh Smith
- Joshua "JD" Wolfer



Top: Mechanical Room Spill
Bottom: Mechanical Room being cleaned

characterization is required prior to the transport and disposal of this material. Pavement areas that have been impacted are pressure washed and the wastewater removed in a vacuum truck for disposal. Impacted soils are excavated, by hand or with a mini-excavator and placed in drums for disposal. If applicable, booms and absorbent material are utilized to protect nearby surface water from potential impacts. Following completion of our field activities, a report is generated detailing the activities at the site, and waste volumes and providing disposal manifests.

Fire Station #20: RES was contracted by Orange County to prepare and implement a Remedial Action Plan (RAP) for this large petroleum contaminated site. Based on the current and historical site assessment results and previous pilot study results, active groundwater remediation using in situ chemical oxidation (ISCO) coupled with Natural Attenuation Monitoring (NAM) was selected as a prudent approach for site remediation. Activities have included preparation of a site-specific Health and Safety Plan; baseline sampling of the existing groundwater monitoring wells; abandonment of groundwater monitoring wells not intended for future monitoring; installation of groundwater monitoring wells and injection wells. RES completed four ISCO injection events, which consisted of approximately 8,000 gallons of a Klosur® CR solution into the shallow and intermediate surficial aquifer depth intervals. Additional assessment and indicated a bypassed area and an additional down gradient area of groundwater impacts, A RAP modification (RAP-MOD) consisting of additional ISCO and PermeOx® Ultra barrier walls was prepared, approved by the FDEP and recently

implemented to remediate these additional impacts. Post-active remediation monitoring and reporting continues.

Pine Hills Road Landfill East: RES managed the Post Closure and Corrective Action Permit renewal for this Resource Conservation and Recovery Act (RCRA) closed landfill. Tasks included permit renewal document preparation and support of Orange County in negotiations with the FDEP. In addition, RES conducted annual groundwater monitoring for the Solid Waste Management Units and Areas of Concern. RES prepared the Annual Environmental Monitoring Report that included groundwater sampling, annual landfill inspection, maintenance reporting, and financial assurance reporting.

Green PLACE Program: Orange County's Green PLACE (Park Land Acquisition for Conservation and Environmental Protection) program enhances habitats through the preservation of environmentally sensitive lands and land management activities. RES has conducted over 15 Phase I ESAs on approximately 1,000 acres of land for this program. The subject sites ranged from 4 acres to over 200 acres properties. The Phase I ESAs were conducted in general accordance with the ASTM, Standard E1527-21. When RECs were identified, Phase II ESA, consisting of soil and groundwater sampling was implemented.



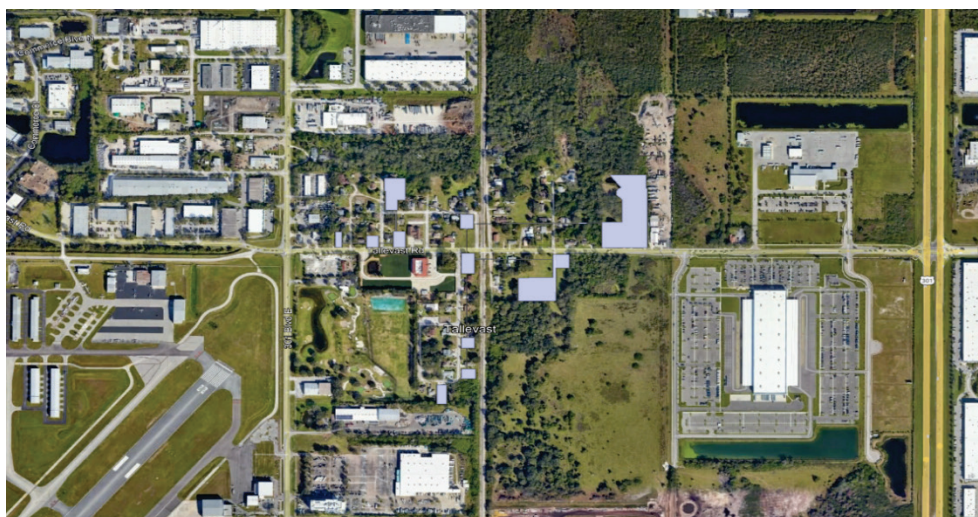
SPCC Plans: RES and our subcontractor developed SPCC Plans and SPCC Plan 5-Year Updates for Orange County-owned aboveground storage tank (AST) facilities in general accordance with EPA regulation 40 CFR Part 112. SPCCs or updates have been provided for recreation, correctional, fire station, Sheriff Aviation department, and Convention Center facilities.

Hurricane Debris Staging Site Sampling: RES conducted soil sampling at a 10-acre Hurricane Debris Staging Site located in Orange County, Florida. The sampling was conducted in general accordance with the FDEP Guidance for Establishment, Operation, and Closure of Disaster Debris Management Sites dated May 4, 2018. The surface soil samples were collected from the debris staging areas and analyzed for the eight RCRA metals using EPA Test Methods 6010 and 6020, Volatile Organic Compounds, using EPA Test Method 8260 and Semi-Volatile Organic Compounds, using EPA Test Method 8270.



Brownfields Cooperative Agreement Grant

University of South Florida | Manatee County, FL



Tallevast Area and Subject Properties for Brownfields Grant

RES was contracted by The University of South Florida (USF) through the EPA Brownfields Cooperative Agreement Grant Number BF02D29422 to provide community engagement and environmental assessment activities for the disadvantaged unincorporated Tallevast community located in southern coastal Manatee County. Many of the households include descendants of the town’s original founding families who settled in the area as turpentine workers after the Civil War. The American Beryllium Company (ABC) was developed in the heart of the community in the late 1950s and operated until at least 1996 manufacturing beryllium machine parts, including components for nuclear warheads. This facility was used as an ultra-precision machine parts manufacturing plant, where metals were milled, lathed, and drilled into various components. Some components were finished by electroplating, anodizing, and ultrasonic cleaning. Chemicals used and waste generated at the facility included oils, petroleum-based fuels, solvents, acids, and metals. Operations were discontinued in September 1996. During ABC’s operation, poor management of hazardous wastes and discharges from a wastewater treatment system contaminated the local groundwater with chlorinated solvents, impacting local drinking water wells. In 1996, The ABC property was acquired by the Lockheed Martin Corporation, the world’s largest defense contractor. Groundwater impacts were initially discovered during a preliminary groundwater sampling program conducted in January 2000 around the former sump on the property. While Lockheed Martin reported the groundwater contamination issue to the FDEP, neither group alerted community residents who discovered the contamination three years later after observing several odd events in the community, all while relying on private drinking water wells. Lockheed Martin implemented a groundwater remediation treatment system that is reportedly scheduled to take over 50 years to be completed with cleanup initiatives. The community was retrofitted with municipal drinking water services and no longer relies on private drinking water wells. Through the EPA’s Brownfields Grant, USF created an opportunity to assist the community of Tallevast with addressing a long-standing environmental injustice. Community-led efforts have been persistent, but lack of funding has stymied their ability to fairly participate in steering the course of their environmental future. The EPA approved a Brownfields Assessment Grant prepared by USF in 2022, to provide funding for planning, environmental assessments, and community outreach activities.

AT A GLANCE.

Client Contact

E. Christian Wells, Ph.D.
 Department of Anthropology
 The University of South Florida
 4202 E. Fowler Avenue, SOC 385
 Tampa, FL 33620
 813.974.2337
 ecwells@usf.edu

Contract Value

\$300,000

Project Size

Approximately 8 acres (15 properties)

Contract Period

2023 – 2025+

Project Type

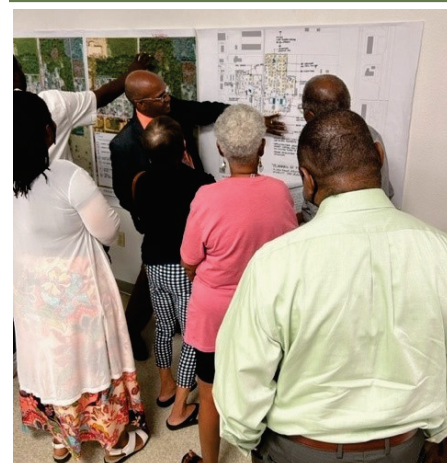
Advisory Services

Project Highlights

- Community Outreach
- Phase I and Phase II ESAs
- Contamination Assessment
- Historical Records Review
- Data Compilation and Analysis
- Brownfields Area
- Environmental Justice Study

Key Staff

- Nadia Locke, P.E.
- Paul Maxwell, P.G.
- Kathryn Eisnor
- Junnio Freixa
- Samantha Brown



2023 Community Vision Meeting



Generic Quality Assurance Project Plan (QAPP): The EPA must approve a QAPP before initiating an assessment for a Brownfields Area, and a Generic QAPP was prepared for the grant to streamline the preparation and review of site-specific QAPP addenda for each property. RES prepared the Generic QAPP which was approved by the EPA in September 2023, for USF to comply with 2CFR1500 requirements to develop and implement quality assurance practices sufficient to produce data adequate to meet project objectives and minimize data loss. RES prepared a Generic QAPP consistent with the EPA Region 4 Brownfields Generic QAPP Template and the EPA Region 4 Instructions for the Preparation of Quality Assurance Project Plans for EPA Brownfields in the Southeast dated July 2020. This Generic QAPP was used as a basis for all environmental testing conducted under this grant and will therefore need to include relevant quality assurance information from RES and laboratories that will be conducting sampling and analysis on these projects. The Generic QAPP includes general elements discussing project management (who will be involved with the project, what is the environmental problem, the background, and history of the problem, how will the data be used, and what decisions will be made with the data), measurement and data acquisition (requirements for sample handling and custody, analytical methods and requirements, quality control sample requirements, equipment calibration, equipment sensitivity, and data management/documentation), assessment and oversight (methods for oversight activities or assessments that will be performed and personnel responsible assigning methods for data evaluation), and data evaluation (how the data will be evaluated to determine if it meets the project requirements and objectives). The Generic QAPP also included discussions on the quality objectives and criteria or measurement data, special training or certifications required, and documentation/recordkeeping requirements.



2023 Community Vision Meeting

Areawide GIS Inventory: RES provided an alternative concept for the use of the grant to prepare an areawide GIS inventory of sites within the community. The purpose of the inventory was to provide an areawide perspective on the known environmental condition of the properties to facilitate future planning activities. The deliverable included a GIS database that can be accessed using GIS, Google Earth, or Google Maps depending on the grant, community needs, and/or preferences.

Community Engagement Support: RES prepared maps for the public and attended four Community Vision Meetings from 2023-2024 to assist the team in presenting information and responding to questions regarding Brownfields and contamination in the community. GIS layers obtained during the GIS

inventory task for the grant were used as a basis for maps needed for community engagements. RES coordinated with USF staff to determine the appropriate format for the maps and attended internal meetings to prepare for the public engagement meetings. Family Oriented Community United Strong, Inc. (FOCUS) emerged in 2003 to address challenges in the Tallevast Community after discovering contamination associated with the ABC facility and to advocate for a comprehensive cleanup plan that challenged inadequacies included in technical reports. RES coordinated with FOCUS personnel during the course of the Vision Meetings and grant process to support residents and liaise with officials.

2024 Tallevast@20 conference: USF conducted this conference at the USF Sarasota-Manatee Selby Auditorium in Sarasota, Florida in April 2024. The objectives of the conference were to share the outcomes of 20 years of understanding and addressing groundwater contamination of the historic African-American Tallevast Community (including recent research funded by the EPA), answer questions from the community and other stakeholders about the history of contamination, health outcomes, cleanup process, and redevelopment planning, and develop an outline for a stakeholder-driven 10-year strategic plan for continued collaboration. The primary audience of this conference was residents of Sarasota and Manatee counties, USF students and faculty, and other stakeholders including local, regional, and state governments. RES was included as a panelist at the conference to discuss and answer questions regarding the historical groundwater contamination in the community researched from technical documentation.

Brownfield Redevelopment Advisory Board Support (BRAB): USF created a BRAB as a mechanism for community members to provide input and evaluate properties to be assessed and RES was requested to provide community engagement support for the grant. RES prepared materials for BRAB meetings and documents that helped guide the community members in



seeking and ranking properties to be assessed. Specific deliverables included a community questionnaire and cover letter, a flow chart for prioritization, ranking criteria, and a PowerPoint presentation to inform BRAB of the program and to help guide the process. RES then provided documents for review based on USF and community input. Numerous meetings were held in 2023-2024 and are planned to continue until the end of the grant.

Phase I ESAs: RES reviewed 15 BRAB Applications submitted by members of the community and facilitated the BRAB's selection of a system for prioritization of assessment. Our approach to performing the Phase I ESAs includes a review of public records, interviews with appropriate local agencies and other appropriate entities, a site and vicinity reconnaissance, and preparation of a written report containing findings, opinions, and conclusions, if RECs, were identified. A review of reasonably ascertainable and practically reviewable public records for the sites



1962 Historical Aerial Photograph

and the immediate vicinity was conducted to characterize environmental features of the sites and to identify past and present land use activities, which may indicate a potential for recognized environmental conditions, as defined in ASTM E1527-21. A site reconnaissance was performed to identify obvious visual signs of past or existing contamination on or adjacent to the site and to evaluate evidence found in the review of public records that might be indicative of activities resulting in hazardous



Seminole Gulf Railway

substances or petroleum products being used or deposited on the site. Interviews with appropriate local officials were conducted to request local knowledge of hazardous substances or petroleum products on the subject property or adjacent properties. In addition, a representative of the current property was interviewed regarding his or her knowledge of hazardous substances or petroleum products on the subject property or adjacent properties. RES conducted a Tier 1 and a non-invasive Tier 2, vapor encroachment screening (VES) in general accordance with the ASTM Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions (Designation E2600-15). The purpose of the VES was to screen for vapor encroachment at the sites using the information collected during conducting the Phase I ESAs. If the Tier 1 screening identifies that a vapor encroachment condition (VEC) existed, then a Tier 2 screen was conducted. Tier 2 screening is a more

refined process that applies numeric screening criteria to testing results to provide greater certainty as to whether a VEC exists. Upon completion of the public record review, interviews, and site reconnaissance, RES provided a written report that documented our findings. The report reflected our evaluation for use by the client in completing the planned property transaction. The findings were presented in terms of the presence of recognized environmental conditions as defined in ASTM E1527-21. Upon completing the coordination with the community, receipt of draft review comments, and necessary supplemental information, the Phase I ESAs were finalized and distributed to the property owners, USF, and the EPA in August 2024.

RECs associated with the properties evaluated included the following: groundwater contamination plume associated with the ABC Facility, fill material imported from the ABC facility to residential properties, groundwater contamination identified in the community associated with The 21st Street East Per- and poly-fluoroalkyl substances Study (an ongoing environmental investigation at the SRQ 300 LLC Property located at the southwest corner of Tallevast Road and 21st Street East), historical railroad operations conducted adjacent to subject properties, historical agricultural operations conducted adjacent to subject properties, operations of a golf course to the west of the community, and operations of industrial usage to the south (Waste Pro) and east (Precision Pavers/SMP Inc./HB Windows) of subject properties.

2024 Community Open House: An open house event was conducted at the FOCUS office in the community in October 2024, to discuss the results of the Phase I ESA Reports with the property owners. Personnel from RES and USF attended the open house event and engaged with the community to discuss each individual Phase I ESA Report. The event was also utilized as



a means to discuss the recommended next steps for assessment of the properties (Phase II ESA) and to obtain site access agreements from each of the residents in order to continue with environmental studies at their properties.



2024 Community Open House Event

Site-specific QAPP Addendum: RES prepared a Site-Specific QAPP for the Brownfields grant that was approved by EPA in December 2024. The Site-Specific QAPP is a project plan specific to the Brownfields site assessment or cleanup work to be performed at a particular property. The Site-Specific QAPP was a single document that addressed all required QAPP elements. The Site-Specific QAPP included a discussion of the Phase II ESA scope at each property, personnel included in the fieldwork, subcontractors being utilized, lab quality manuals, typical forms used, and maps with proposed sampling locations.

Phase II ESAs: Based on the results of the Phase I ESA reports which identified RECs and VECs on all the properties evaluated, Phase II ESAs that include soil and/or groundwater assessments were recommended. The objectives of the Phase II ESAs are to first evaluate the potential

presence of contamination and are scheduled to begin in January 2025. During Phase II ESA activities, RES will supervise the advancement of soil borings at locations throughout the sites and near suspected areas of contamination. The soil borings will be advanced using a decontaminated stainless-steel hand auger and/or Direct Push Technology (DPT) drill rig. Soil samples will be collected and analyzed by a state-accredited laboratory. RES will compare the laboratory results to the Soil Cleanup Target Levels listed in Chapter 62-777 F.A.C. to evaluate if contamination exists at those locations. Upon the completion of soil sampling activities, RES will oversee the installation of groundwater monitoring wells to facilitate groundwater sample collection. The monitoring wells will be installed using a DPT drill rig. Following the development and purging of the temporary monitoring wells, groundwater samples will be collected and submitted for laboratory analysis. RES will compare the laboratory results to the Groundwater Cleanup Target Levels listed in Chapter 62-777 F.A.C. to evaluate if contamination exists at those locations. The rationale for laboratory analysis of soil and groundwater samples to be collected is based on the REC(s) identified for the given property during the Phase I ESA. Upon completion of the fieldwork and laboratory analysis, we will provide a written report that documents our findings. RES will provide Phase II ESA documents for client review. Upon receiving the results of the soil and groundwater laboratory analysis, a Passive Soil Gas (PSG) survey was recommended in areas where volatile shallow groundwater contaminant concentrations exceed applicable CTLs. RES will deploy up to 30 BeSure Sample Collection Kit™ PSG samples. These devices contain a set of hydrophobic sorbent cartridges within a glass vial that is capped with a mesh screen to allow exposure to soil gas. Installation, deployment, and retrieval of each sample will be conducted following the protocols of the Beacon Environmental Services passive method. Once the data is analyzed, RES will prepare a vapor encroachment report that will provide a community-wide evaluation of soil gas in the area.



Community Dentist Office – 1619 Tallevast Road



Old Pompano Improvements HUD Environmental Assessment and Cultural Resources Assessment

City of Pompano Beach | Pompano Beach, Broward County, FL

The Old Pompano project area was first settled in the late 1800s with the extension of Henry Flagler’s Florida East Coast Railroad. The area was built to its current configuration during the early 1900s and has not been upgraded since that time. The existing infrastructure has become debilitated and is in need of repair or replacement. RES was awarded a contract with the City of Pompano Beach in 2014 to provide consulting services for NEPA review and compliance with the National Historic Preservation Act for the Old Pompano Improvements project.

RES prepared the environmental documents necessary for the City of Pompano Beach to apply for funding under the HUD for the area improvements for Old Pompano. The purpose of the project is to revitalize the downtown area; the existing streets and avenues chosen for this project comprise the central core of Old Pompano. In addition, the streetscape design and specific infrastructure improvements were selected in order to continue and complement efforts in the Community Redevelopment Area neighboring the west side of the project.

RES’ scope of services included preparation of an Environmental Assessment of the area in accordance with HUD guidelines and managing a subconsultant that prepared a Cultural Resources Assessment to address Section 106 of the National Historic Preservation Act requirements

AT A GLANCE.

Client Contact

Mr. Mark Korman, Program Compliance Manager
Office of Housing & Urban Improvement
100 W. Atlantic Boulevard, Suite 220,
Pompano Beach, Florida 33060
954.786.7839 | mark.korman@combfl.com

Contract Value

\$39,102

Project Size

Citywide

Contract Period

July 2014 – February 2015

Project Type

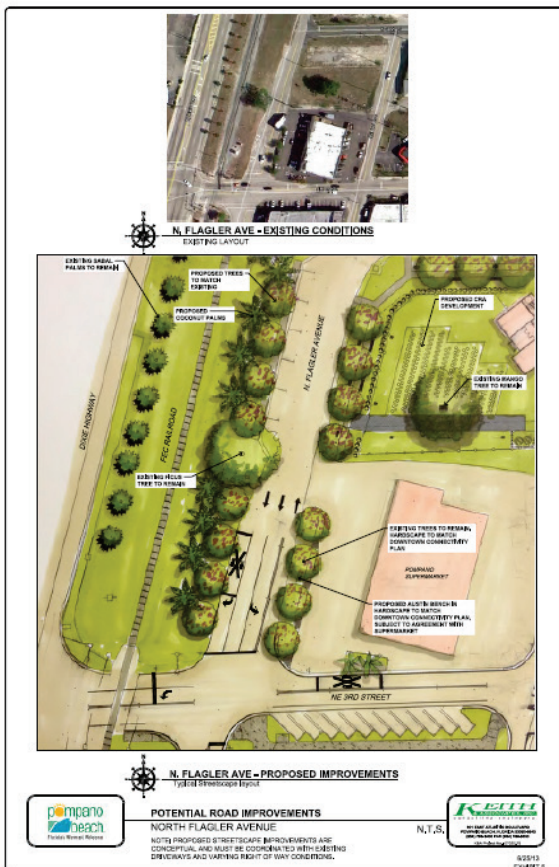
Advisory Services

Project Highlights

- HUD Environmental Assessment
- Cultural Resources Assessment

Key Staff

- Nadia Locke, PE, LEED AP
- Gayle Stone, MS





Jose Marti Park Adaptive Re-Design

Curtis + Rogers Design Studio | Miami-Dade County, City of Miami, FL



RES provided civil and environmental engineering services that include environmental site analysis and impact evaluations, vulnerability assessments, resiliency planning, and design related to drainage improvements, green infrastructure, and stormwater management at the Jose Marti Park site on the west bank of the Miami River in the heart of Downtown Miami. This project site is ±13 acres and consists of a waterfront park, paths, playgrounds, a pool complex, gym, recreation and community center, basketball courts, baseball fields, exercise equipment, and waterfront access via seawalls and imbricated shoreline areas. I-95 lies over a portion of the site, and overhangs the gym building, basketball courts, and parking areas – and this area was historically the location of the Tent City during the Mariel Boatlift in the 1980s. The park is the center for the community in this area of Little Haiti and regularly experiences tidal flooding from the river and this is exacerbated during the King Tide portions of the year, and hurricane season. With future sea level rise projections showing increased water levels for the park, our team of architects, engineers, scientists, and planners has been tasked with adapting the waterfront to future predicted sea level rise tidal and storm surge elevations that will set a model for other properties along the Miami River and other portions of the city that can benefit from this adaptive design.

The project was initiated by a Florida Inland Navigation District (FIND) grant related to requirements for a raised riverwalk, 1,100 linear feet of living shoreline, kayak launch, and improved seawall at the site. The project schedule had to be expedited, including during the Covid pandemic, to meet the FIND grant deadline which was surpassed by the project team. RES' role on the project was to provide civil/environmental engineering for sea level rise adaptation and stormwater upgrades to the site to reduce onsite and neighborhood flooding and to provide water quality treatment using nature-based solutions to the maximum extent practicable. RES' role was to lead nature-based solutions related to stormwater retrofits and living shoreline design. RES conducted an evaluation on the feasibility of pump stations and drainage wells to reduce flooding, and deep drainage wells were designed into the project to improve resilience and redundancy in drainage design. RES provided environmental engineering and science, and ecological design considerations for the living shoreline, living seawall, habitat restoration, and green infrastructure components of the project. RES performed the tree inventory and Florida bonneted bat survey for the site. We were responsible for environmental permitting for the stormwater improvements and received the local Miami-Dade DERM stormwater permit on the first submittal. RES coordinated FDEP/SFWM environmental resource permits and drainage well permits, assisted with USACE permitting, and was the lead agent for the

AT A GLANCE.

Client Contact

Ms. Aida Curtis, Principal
Curtis + Rogers Design Studio
7520 S. Red Road, Suite M
South Miami, FL 33143
aida@curtisrogers.com
305.442.1774

Contract Value

\$250,990 (Consulting)
\$23,243,422 (Construction)

Project Size

13 acres

Contract Period

October 2019 – Ongoing

Project Highlights

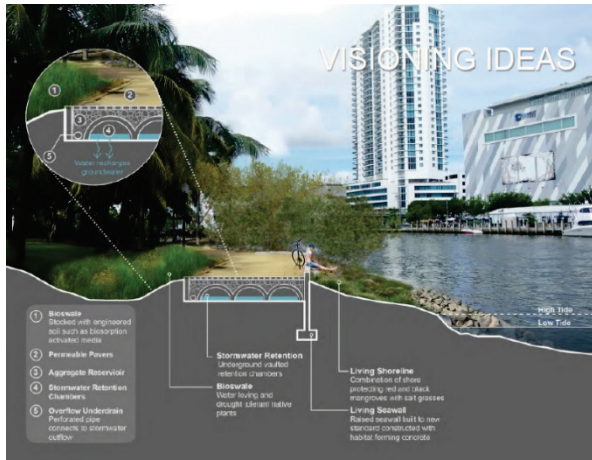
- FIND grant
- June 2023, Awarded 1st Waterfront Edge Design Guidelines (WEDG) verification in Florida
- March 2021, Awarded ~\$14M – CDBG-MIT General Infrastructure grant

Project Staff

- Patrick Shearer, PE
- Jim Orioles, PE
- Esteban López, PE
- Justin Freedman, MS



FDOT District Six construction agreement related to improvements in the FDOT ROW under I-95 that FDOT leases to the city. RES met with the FDOT District Six District Secretary and City of Miami attorneys several times to coordinate permit reviews and improvements at the site.



RES provided site analyses, assessments, and design for innovative stormwater retrofits involving low impact development (LID) design for this hyper-urban, green resilience project. Components of the environmental site analysis and vulnerabilities and resiliency assessments included heat island effect considerations, energy resource considerations, stormwater and green infrastructure assessment, community outreach, and site design related to the stormwater and environmental aspects of the project. The project is a pilot designed to showcase and scale up resiliency and adaptation design measures, to create a toolbox for Miami and South Florida to adapt with sea level rise, and as a model for other parts of the Riverwalk/Baywalk in Miami. A variety of climate-change-oriented sensors, metrics, and grant funding approaches were included in RES' project evaluation to assist with project funding and resiliency. This project features stormwater design

conveying green infrastructure such as permeable pavement with regenerative underground exfiltration chambers, smart stormwater infrastructure, bio-retention/bio-swale planting areas; tree planter retention areas with structural soils; bio-sorption activated media; pollutant removal devices and filtration; solar power; stormwater engineering art; and climate change concepts through public education and outreach. The stormwater retrofits have been integrated into the living shoreline aspects of the project, and kayak ramp, with the intent to reconnect the historic hydrologic cycle to the water's edge portion of the river, enhance ecology for oyster restoration, and provide resiliency for the park and neighborhood. Tidal valves and backflow preventers with manatee protection are being installed on existing outfalls to prevent "sunny day flooding" and minimize tidal water from the river from impacting drainage at upstream locations.

RES led the natural systems and green infrastructure design and integrating the LID principles to showcase stormwater management as functional environmental art which ties the site to the Everglades and Biscayne Bay natural areas of Miami and the Miami River. Innovative living seawall elements are part of this design and reduce carbon footprint. The final design has been bid and is going to construction in early 2025 and is part of the Tranche 1 of the City of Miami Forever Bond general obligation bond program. The project team has many partners, and the New York-based Van Alan Institute has led a separate and concurrent study and series of events to educate the community on sea level rise, climate change, gentrification, and worked with our project team to create a project that provided equity, economy, and ecology for the citizens, the Miami River, and the City of Miami. The project is intended to improve pedestrian safety, harness social interaction and business development, and to improve water quality and flood reduction in the district. ~\$18 million was awarded for a CBDG grant, FIND, and local grants. The project is the first in Florida to receive the Waterfront Edge Design Guidelines (WEDG) verification, which is a green rating system for waterfront sites.



See **Tab 4** for a summary of experience and qualifications of key personnel who will be selected to serve as Project Managers for the City, based on the task requested.



Scope Item Experience

1. Permitting and Meetings with Agencies: RES' staff has prepared hundreds of permit application packages. We have conducted many environmental permitting projects for neighborhood improvement projects, bridge work, utilities and other urban projects. Our staff is experienced in data collection, wetland delineation, listed species surveys, mitigation assessments, seagrass mapping and monitoring, design drawings, drainage calculations, and conceptual plans. We are well known by the permitting agencies and regularly facilitate agency meetings, such as pre-application meetings in order to identify potential permitting challenges at the beginning of a project, often times avoiding substantial delays in the permitting process. Several of our staff are former agency permit reviewers or compliance inspectors, which gives us additional insight to nuances of the process.

An example of our recognized permitting expertise is our contract with FDEP to perform permitting oversight in support of the development of the Florida Keys Overseas Heritage Trail (the Trail), a 106-mile recreational paved trail leading from Key Largo to Key West, utilizing 23 of the historic Flagler Railroad Bridges. This project involved numerous segments designed by different engineering firms. RES' role was to develop a Permit Plan to provide guidance to all of the various entities to streamline and unify the permitting process. Specific duties on this project included researching and cataloguing records of threatened and endangered species and wetlands along the Trail alignment, coordinating design and permitting activities for multiple engineering firms designing segments of the Trail, creating a guidance plan for the environmental permitting and development of the Trail, website development and Class of Action Determination documentation.

"I believe that the consensus is that this is the best monitoring report we have ever received...Personally, this is the first monitoring report that I have reviewed where I did not have several pages of comments requesting clarification and/or asking for information that was supposed to be provided."

– Brenda Archer, U.S. Army Corps of Engineers

Another example of our permitting experience is the technically challenging permitting of wetland mitigation banks for thousands of acres of wetland mitigation in Florida, Texas and Louisiana. Please note the commendation that we received from the USACE regarding one of these projects.

2. Written and Verbal Reports: Communication is an important part of environmental engineering and consulting. Because the majority of our work is for the public sector, we regularly provide presentations to, and written reports for, public officials to support staff needs. We have presented projects and benefits of the Brownfields Program at City neighborhood associations, task forces and staff on multiple occasions. Ms. Locke has twice presented a Smart Growth Excellence award to the City of Fort Lauderdale City Commission on behalf of the SGP, once for the Sistrunk Boulevard improvement project and once for the City's Connecting the Blocks program.

3. Grant Assistance, Applications, Support: Various funding mechanisms are available for a variety of environmental projects. RES has assisted our clients in obtaining over \$30 million in funding. Examples of our experience include the following:

- For the City, we prepared a grant application for a Section 319 Grant that resulted in the City being awarded funding for the installation of a vortex separator stormwater treatment system for the North Fork of the New River.
- RES conducted an analysis of grants for the City for the River Oaks project.
- We prepared the design and 319 grant proposal that resulted in over \$500,000 in funding for stormwater improvement projects for the City of Melbourne.
- We assisted the City of West Palm Beach in obtaining a \$200,000 EPA Brownfields Cleanup Grant for an urban farm.
- RES assisted Islamorada in securing another \$6.5 million in FDEP grant funding for a consolidated wastewater treatment facility. Our participation included planning and conceptual design by identifying a suitable application of the grant funds. RES also negotiated with the construction firm already under contract to implement the grant-funded activities. We managed the design and permitting activities to ensure compliance with the ambitious deadlines which were part of the terms of the grant.

4. Ordinance and Guidelines Review, Amendments and Development: RES is conversant with the process of developing ordinances and laws from the local to state levels. The following outlines examples of our experience:

- RES provided written recommendations for the City of North Miami Beach's ordinances as they relate to stormwater management.



- RES crafted land development regulations to support Islamorada stormwater master plan. Some of the areas that were addressed include the development/redevelopment process and its relation to Islamorada's review process; adherence to existing county, SFWMD and state regulations; and creation of a matrix of alternatives related to the type of designated land use activities as well as specific design criteria needed for each stormwater treatment facility. We also developed a technical manual to assist applicants in interpreting the stormwater codes and regulations. In 2014, we updated the technical manual to reflect modern and relevant stormwater practices..
- Ms. Locke is on the Board of the SGP. Through a TOUCH Grant the SGP conducted audits of the City's codes and ordinances, and provided recommendations for modifications to reduce current obstacles to implementing smart growth principles, including complete streets concepts.
- In our role as City Arborist for Dania Beach, we assisted the City with obtaining a \$10,000 grant from the State of Florida for revising the landscape code and producing a technical manual and website to assist with implementation of the code and increased efficiency in plan and permit review. RES' arborists provided revisions to the landscape code and authored the technical manual.

5. Regulatory Compliance: RES is experienced with, and keeps abreast of, federal, state, county and municipal ordinances, laws, rules, codes and regulations. We have developed management programs for our clients to assist them in obtaining and maintaining facility compliance, as highlighted below:

- RES is under contract with FDOT Districts One, Three, Four, Five and Seven to provide permitting and compliance services for NPDES permits.
- RES facilitated the regulatory compliance transition of the South Florida Rail Corridor (SFRC) from CSC Transportation to the South Florida Transportation Authority to prepare for the transition of the operations which occurred at the end of March 2015. We assisted with preparing agreements and documents that documented existing conditions, permits and responsibilities and expectations of responsibilities, communications and processes following the transition. This work was conducted on behalf of the owner of the SFRC, FDOT District Four.
- Our staff has performed stormwater compliance inspections for tenants at the Hollywood-Fort Lauderdale International Airport.
- RES developed SPCC Plans for several City of Miami Beach facilities including their public works compound, fire stations, police station, convention center and pump stations.
- RES conducted SPCC updates to all facilities for a large Orlando-based theme park.
- RES conducted the storage tank closure assessment for the largest UST system in the State of Florida in order for Broward County to be in compliance with the FDEP upgrade requirements.

6. Environmental Measurements: Providing measurements, testing, and monitoring of environmental criteria is the fundamental basis of many of our projects. This includes soil, sediment and groundwater testing for contaminants, monitoring surface water quality (turbidity, bacteria, metals, organics). Our staff who conduct this testing has completed the FDEP Standard Operating Procedures Sampling Training for Groundwater, Surface Water and Wastewater. This category also includes measurements such as water elevations and fluctuations. We collect substantial amounts of water level data as part of our permitting and monitoring of thousands of acres of wetland mitigation banks. Many of the projects outlined in Tab 3 demonstrate our experience in conducting a variety of environmental measurements.

7, 14, and 16. Asbestos, Lead-based Paint, Radon, Mold and Indoor Air Quality: AirQuest will provide support services to RES in the areas of testing, assessment, remediation plans, and abatement related to asbestos, lead-based paint and radon, mold and Indoor Air Quality (IAQ). RES has a long-standing relationship with AirQuest and partnered with them on many municipal contracts, including the Cities of Pompano Beach, Miami Beach and North Miami Beach. Although this work will be conducted by AirQuest, our contract manager, Ms. Locke has conducted dozens of projects involving asbestos, lead-based paint and radon, which enable her to communicate work needs and products efficiently and effectively with the City and AirQuest. AirQuest's experience includes several south Florida projects as a subconsultant to RES. Projects include asbestos survey and abatement oversight for asbestos floor tile in the City of North Miami Beach's City Hall and building and an indoor air quality/mold survey in that same building.



8. Phase I and Phase II ESAs: RES has performed numerous Phase I ESAs throughout the state of Florida, and our approach follows the Standard for ESAs: Phase I Environmental Site Assessment Process (E 1527-13), developed by the ASTM and complies with the EPA's All Appropriate Inquiry standard. We conduct in-house training sessions annually to ensure compliance with these standards and to discuss industry trends and nuances that arise in various projects. We are leaders in providing training to outside organizations on due diligence projects. Our staff have presented on this topic at the Florida Bar Environmental Law and Land Use conference, the Attorney Real Estate Council and Due Diligence at Dawn. Our multi-disciplinary staff has completed over 1,000 Phase I and Phase II ESAs. We are adept at handling the wide range of issues that can become apparent during an environmental site assessment and can perform all phases of activities that may be required. Examples of Phase I and Phase II ESAs that



RES staff have conducted in the City and for the City include the following:

- Sailboat Bend Park (Phase I and II ESA)
- Hорт Elementary School (Phase I and Phase II ESA)
- Channel Square (Phase I ESA)
- Twin Lakes (Phase I ESA)
- Lauderdale Manors Neighborhood (Phase I ESA)
- Progresso Village Neighborhood (Phase I ESA)
- Melrose Manors Neighborhood (Phase I ESA)
- Golden Heights Neighborhood (Phase I ESA)
- CRA Parcel at 538 NW 9th Avenue (Phase I ESA)



9, 11, 12, 13, 21, and 39. Soil, Groundwater, Sediment and Atmospheric Testing, Assessment and Remediation Plans (including Remediation Systems Design at City Sites): A large portion of our business is related to assessment and remediation of contaminated properties. We have helped our clients assess, remediate and manage risks associated with contaminants of concern including chlorinated solvents, arsenic and lead, petroleum, pesticides, ammonia, and Polychlorinated Biphenyls. Examples of a few recent projects are highlighted below.

- RES is conducting soil testing for the City Hall site where an underground storage tank was removed as part of the demolition. The City has hired RES to complete the assessment and bring this contamination issue to closure.
- RES conducted soil and groundwater testing in 36 locations along Sistrunk Boulevard from I-95 to Andrews Avenue in anticipation for the long-awaited construction. Our report and suggested language for addressing contamination encountered during construction were included with the bidding documents. When contamination was identified, we assisted the City with mitigating costs associated with this.
- RES completed site assessment activities, remedial planning and implementation for the City of Miami Beach's Green Waste facility. This remedial plan involved installation of an engineering control over impacted soil and conditional regulatory closure. We have completed the closure and it has been accepted by Miami-Dade County.
- RES conducted a site assessment and prepared a remediation plan for the City of North Miami Beach on their largest cleanup project, which is an abandoned solid waste dump. This former landfill was operated by Miami-Dade County, and we are currently implementing the remediation.

10. Dewatering Plume Calculations for Drawdown Effects: RES has prepared dewatering permit applications for project such as the I-95 Express Lanes Phases 3A and 3C. We are very familiar with the SFWMD requirements for ensuring that plume migration will not impact contaminated sites or wetlands or exacerbate the saltwater intrusion line, among other considerations. We have successfully obtained dewatering permits for several projects requiring this type of analysis.

17. Brownfield Compatibility Legislation Studies: RES' staff experience can benefit the City in determining if Brownfields designations will enhance the stimulation of redevelopment of municipal or private properties. Our staff have worked on Florida Brownfields sites including Coral Square Shoppes, Sunterra (First Brownfield in Florida), Poinciana Industrial Park, Lakewood Pointe, HD Supply Facility, and HD Mega-Center. We are a consultant for the TCRPC's Brownfields Assessment contract, providing all the necessary support services and EPA Grant required paperwork. Our contract manager, Ms. Locke,



was a commission appointee to the Broward County Brownfields Task Force and is former President of the Florida Brownfields Association (FBA). She has presented the benefits of the Brownfields program to neighborhood groups, a CRA Advisory Board and staff members on numerous occasions.

18. Aboveground and Below Ground Petroleum Storage Tank Contamination Testing and Evaluation: RES has extensive storage tank management experience. Project experience ranges from relatively simple AST and UST removals that include monitoring well installation and soil and groundwater sampling in accordance with FDEP's Storage Tank Closure Assessment Requirements, to assessment and remediation of leaking underground storage tanks. RES completed the largest UST upgrade in the State of Florida. This project started as an UST system upgrade project for 13 USTs with a combined total volume of 392,000 gallons. RES' role was to provide assistance with developing the environmental portions of the contract documents for the construction project and to conduct the storage tank closure assessment and reporting activities. This work was completed for Broward County's Mass Transit facility. We also obtained \$50,000 in funding from the State for source removal activities related to the tank closure.

19. Endangered and/or Threatened Species Evaluation and Relocation: RES' staff of ecologists and biologists offers decades of formal education and practical experience in the assessment and determination of permitting requirements for lands occupied by listed species. RES has worked closely with both private and public entities throughout Florida to assess



project specific habitat and mitigation requirements for lands occupied by listed species. Our experienced ecologists can determine the potential presence of protected species as well as design and conduct both quantitative and qualitative surveys necessary to estimate population density and habitat usage of protected species on any given site. Our staff is versed in land planning, relocation and mitigation to manage both development and listed species protection.

Our staff also keeps current with the changing regulations involved with listed species such as recent changes to gopher tortoise permitting and relocation. Several of our staff have participated on numerous boards or spoken at committees and conferences on these issues. RES employs several Gopher Tortoise agents. This certification requires a significant amount of direct experience; there are only six Gopher Tortoise agents in Broward County. Gopher tortoise relocations must be performed by qualified Gopher Tortoise agents.

RES has conducted surveys, permitting and relocation of burrowing owls and gopher tortoises at the FXE. We have also provided on-call support to FXE during construction to respond quickly to abate "starter burrows" when they were observed in construction areas.

20. Inspection Services to Monitor Possible, Threatened or Actual Contamination and Remediation Activities: This type of evaluation could include environmental monitoring under a variety of circumstances. Examples include evaluation of potential releases or public/worker exposure during construction activities such as those performed during site improvements that penetrated the geotextile membrane at Lincoln Park. It could also include proactive review of potential contamination impacts from proposed dewatering activities. It could also include identification of potential point sources that could impact surface water, such as stormwater compliance inspections. Our staff experience in these types of scenarios includes:

- Responding to discovery of petroleum impacts at Fire Station #49 during construction. This immediate response and support minimized the City's liability and impacts to the construction schedule.
- Developing dewatering plans at contaminated sites and providing on-call support to the City during the early stages of construction of the Sistrunk Boulevard project.

22. and 37. Carbon Foot Print Audits / Greenhouse Gas (GHG) Inventories: The project team can conduct carbon footprint audits for selected City facilities and infrastructure with focus on those that have a high energy demand or significant GHG sources. We can also conduct evaluations of carbon sequestration being provided by existing or future urban plants. Our subconsultant, AirQuest, has experience in conducting GHG and brings their additional experience to the team. They conducted a Corporate Social Responsibility (CSR) audit for a \$120 Million, 340 employee corporation based in Sunrise, Florida. The scope included determining screening-level GHG emissions and analyzing business functions in the following areas for CSR initiatives and opportunities: information technology, procurement, printing, facility design, transportation and community involvement.



- While the City has gone through an extensive analysis of this already, our team can provide detailed site visits of facilities that would consist of an assessment of the building's primary energy use systems and sources of GHG to identify potential energy conservation programs. Such building performance and benchmarking reports will be helpful to continue to plan for future energy efficiency and conservation improvements.
- Our team can assess other important GHG sources such as refrigerant usage or generator fuels. We can develop targeted carbon footprints for individual facilities and assist the City in tracking improvements over a longer term period.
- RES' expertise in arboriculture and urban forestry services provides municipalities an opportunity to demonstrate the carbon sequestration of the urban canopy. We can conduct an analysis of the environmental benefits of City projects that are already planned. We have completed this analysis for Manatee County and all of its municipalities. This analysis can provide the following information to the City for all its existing or planned environmental resources:
 - Tons of carbon sequestered annually
 - Increase in tons of carbon sequestered resulting from future projects
 - Pounds reduction of air and water pollution annually
 - Financial estimate of stormwater management functions of vegetation cover
 - Dollar value of the environmental benefits of the urban canopy

23. Sustainability Evaluations: Sustainability is often left open to interpretation as it remains a broad and complex concept that has not been consistently defined. It can refer to the way a City utilizes water, energy and natural resources, or the way that it reuses and recycles waste materials. RES' scientists have been at the forefront of sustainability planning. Mr. Justin Freedman, RES senior scientist, participated in the development of the original Broward County Climate Change Action Plan where he championed urban reforestation. RES focuses on both environmental and built inputs and incorporating engineering and natural sustainability practices.

- RES conducted a study for Manatee County that assessed the impacts of development and severe weather on the County's forests in urban and rural areas. The study calculated changes in the ability for the trees to sequester and store carbon and to shade buildings and reduce energy costs and made recommendations that helped guide the City of Bradenton in developing its tree protection code.
- In a similar study conducted for the City of Lake Worth, RES advised on trees that would maximize environmental benefits (i.e. carbon sequestration and energy savings) while accounting for sea level rise and increased flooding.
- RES conducted a study for the City of Miami Beach that explored the benefits of planting additional trees within City parks, along streets and within municipal properties based on the environmental benefits provided.

The City produced a Sustainability Action Plan and has historically tracked its progress in leadership, air quality, energy, water, built and natural environment, transportation, waste recycling and progress tracking and reporting. RES can help the City continue to track progress and help incorporate other concepts (i.e. urban forestry) into the program.

24. Wetland Delineations: RES key ecological staff members have each delineated thousands of acres of wetlands. This experience includes flagging, Global Positioning System (GPS) surveys of wetland delineation points, characterization of wetlands and review of wetland determinations with agency staff. The key ecological staff members for this project have not only provided these services for a wide number of mitigation and restoration projects, but they have also reviewed and approved jurisdictional delineations as state wetland permit reviewers. Several RES ecological staff members are regularly invited to teach classes on wetlands, listed species, ecological restoration and permitting.



The City of Fort Lauderdale is an urban environment with few remaining freshwater and mangrove wetland systems. The wetland systems that remain are predominantly along the coast and within preserved areas. Additionally, there are swales, streams and other waterbodies throughout the City that function as wetlands and provide habitat for wood storks and wading birds. Having participated in numerous wetland delineations and assessments throughout the City, RES ecological staff are familiar with the wetland areas within the City and will work with the City to provide guidance for potential



development within the vicinity of wetland areas, or for enhancing existing wetland systems. At the City's request, RES will conduct jurisdictional wetland delineations to identify the limits of regulated wetlands within the project area. Delineations will be conducted in accordance with the State of Florida and the USACE regulations. The following projects demonstrate some of RES' local experience:

- Conducted wetland delineation for the River Oaks Park regional stormwater park project.
- Conducted a wetland delineation within the FDOT ROW along US 27 for a proposed roadway expansion project in Broward County.
- Identified wetlands along I-95 and I-75 within Broward County for proposed Intelligent Transportation System installation.
- Conducted mangrove delineation and Essential Fish Habitat assessment for the Dixie Highway Bridge over the Hillsboro Canal. Mitigation support included design and construction oversight for offsite mangrove mitigation at Westlake Park and conducting onsite oyster bed surveys and relocation.
- Provided federal and state permitting support including wetland, mangrove and mean high tide delineation, completion of Environmental Resource Permit (ERP) application and agency coordination for an FDOT roadway stabilization project in Palm Beach County.
- Performed a wetland delineation for the proposed improvements to I-95 from south of Glades Road to south of Linton Boulevard, a length of approximately 6.5 miles in Palm Beach County.
- Conducted a wetland delineation and listed species survey for a 124-acre forested parcel in Medley, Florida. The site is to be developed into an industrial park.

25. Environmental / Social Justice (E/SJ) Evaluations: It is our experience that addressing E/SJ issues are more successful when the efforts come from within the community. Our project manager, Ms. Locke, actively participates in the Environmental Justice and Public Health Committee of the FBA. She also presented at Barry University's forum on Environmental Justice. RES is prepared to assist the City with addressing E/SJ issues on a proactive basis. RES is very involved in the E/SJ cause from several aspects. We volunteered to provide instruction to the City of Miami for the first session of their Brownfields Job Training Program. RES taught a course on Stakeholder Involvement to support the program. Our FDEP-Certified Stormwater, Erosion and Sedimentation Control Trainers provided free training to the class yielding an FDEP-certification for an entire class of participants. This skill and credential is now enhancing the graduates' ability to obtain meaningful employment in the environmental field.

We have worked with community leaders and stakeholders to educate residents on environmental issues to provide education, comfort and manage expectations. An example we mentioned earlier is the Taylor Park project. We met with residents that lived in proximity to a contaminated public park on two occasions to alleviate their concerns. Once again, this effort was led by our contract manager.

26. Water Quality Evaluations: RES provides a wide range of surface water and groundwater quality evaluations including NPDES, Water Use Permits, ERPs and TMDLs. RES supports the City regarding TMDLs and other emerging water quality issues. We are currently the prime consultant for implementing the NPDES program for FDOT Districts One, Three, Four, Five and Seven, each of which has TMDLs, but in different stages. In Broward County for example, there are eleven adopted TMDLs for fecal coliform. RES has extensive experience coordinating and preparing BPCPs in accordance with Part VIII of the City's NPDES MS4 permit, including organizing "maps on the table" and "walk the water body" meetings.

RES is a recognized leader in water quality issues related to stormwater water quality. We have on staff former FDEP personnel, and our scientists and engineers are committee members, serve on advisory committees and are regular presenters on water quality issues at technical meetings including at Florida Stormwater Association (FSA) and Florida Permitting Summer School annual conferences. RES represents the FDOT at BMAP meetings (ex: St. Lucie Estuary, Lake Okeechobee and Indian River Lagoon) and provides FDOT technical support in assessing FDOT's commitments by reviewing FDEP pollutant load models, developing project lists for meeting pollutant load reduction goals, conducting pollutant load analysis reviews, and calculating pollution loads and load reductions using GIS and FDEP models. In addition to providing TMDL support, other facets of implementing the NPDES program for which RES provides support includes conducting hundreds of inspections of stormwater facilities and outfalls; updating the FDOT's GIS Geodatabase; providing illicit discharge detection and elimination training and research; inspecting vehicle maintenance yards; conducting high risk facility inspections, and preparing the annual reports for Phase I and II NPDES MS4 permits.



27. Historical and Archeological Reviews: The majority of historical and archaeological reviews that we conduct are for NEPA compliance projects that are seeking funding either through the HUD, Federal Highways Administration (FHWA), or from the Federal Bureau of Prisons. Through these NEPA reviews, we are very capable of conducting desktop and preliminary screening reviews to determine if there are documented resources in an area of a project. We have conducted this service for multiple neighborhood improvement projects within the City including South Middle River, Riverside Park, and Magnolia Park. We have also conducted these reviews for the City of Pompano Beach CRA, private entities and FDOT. On occasion, the expertise of an archaeologist is necessary. For one project in Old Pompano, a complete Cultural Resources Assessment was necessary to obtain HUD funding.

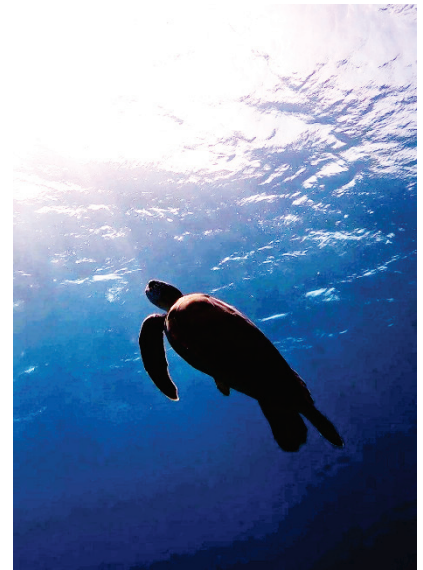
RES engaged the non-profit organization, Archaeological and Historical Conservancy. We have also engaged experts on several projects, including the SR A1A improvement projects along Fort Lauderdale's Beach. We would envision that one of these firms would be engaged if such expertise became necessary for a City project. However, we have not experienced that need under this contract since we have begun working for the City in 2007.

28. and 15. HUD/NEPA Environmental Assessments and Remediation Plans: RES understands that projects receiving financial assistance from the HUD and other federal agencies must be in compliance with NEPA. RES' staff have experience with NEPA evaluations using processes from many federal agencies including HUD, FHWA, Federal Communications Commission, Health Resources and Services Administration and FEMA.

- RES also conducts NEPA assessments to comply with HUD requirements for release of funds. We have regularly provided these assessments to the City's engineering and housing departments. We have completed simple projects such as NEPA checklists, more complicated ones requiring an Environmental Assessment and we have also completed two Floodplain Management Eight Step Decision Making Process documents for the City (area wide and South Middle River).
- We have provided a complex NEPA assessment for the City of Pompano, where a full Cultural Resources Assessment was required by HUD and one for community health center where the review needed to comply with the Department of Health and Rehabilitative Services.

29. Conduct Benthic Surveys: RES conducts benthic surveys for clients who are planning in-water work or construction that will otherwise impact benthic resources. While we have conducted this work for the City, we also provide this for other clients:

- RES has completed benthic surveys for the Sylvan Lake and Mayan Canals for the City. These services were provided to support permitting being conducted by the City for maintenance dredging near outfalls.
- We conducted a benthic survey for the Isle of Palms Seawall rehabilitation project. The survey report was used to support permitting.
- RES provides ongoing dive support to the team of divers for the Port of Miami canal dredging projects conducted to accommodate the large Panamax ships. Our divers monitor, assess and document the success of the relocated corals as required by permits.
- We conducted a benthic survey of the canal adjacent to the City's Channel Square beach project. This was conducted in support of master planning, but the project never came to fruition.



30. Assist City to Prepare Environmental Permit Applications, Respond to Request for Additional Information, and Obtain Environmental Permits Associated with Seawall Work, Canal Maintenance Dredging or any Dredging Work for Marine Facilities: As mentioned in the paragraphs above, we have provided the environmental surveys required for permitting seawalls, docks, piers, and dredging projects. We have submitted and processed permit applications with the USACE, SFWMD, FDEP and Broward County EPGMD, including responding to Requests for Additional Information from these agencies and commenting agencies such as US Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) and the Florida Fish and Wildlife Conservation Commission (FWC). RES assisted with permitting for the Isle of Palms seawall rehabilitation and supported Broward County's permitting for the Hollywood Mooring Field where dredging was needed and for the New River bridge improvements. We are the lead in obtaining permits for the City of Miami Beach's Mooring Field, overwater Baywalks, and several seawall upgrades.



31. Design, Install and Monitor Groundwater Observation Wells: RES conducts groundwater observation well design, installation and monitoring on a regular basis. This type of data collection is part of our everyday work. Wells are used for a variety of reasons including to measure groundwater elevations and fluctuations, contaminant concentrations, groundwater temperature, hydraulic conductivity. This service is often associated with one of the larger tasks described herein.

32. Design, Install and Monitor Tide Gauges: RES has designed, installed and monitored tide gauges under a variety of circumstances. These have been utilized for wetland mitigation projects and to evaluate tidal variations and links to groundwater elevations in support of planning for future sea level rise. A few projects are described below:

- RES prepared a sea level rise evaluation for the City of Miami Beach to assist them in future planning of elevations of infrastructure. We installed dataloggers in various locations throughout the beach to evaluate the effect of tidal fluctuations on groundwater on inland properties. This data was used with LiDAR to create a digital elevation model to identify areas of limited storage capacity and to forecast future flood areas with respect to incremental increases in tides and groundwater. The City of Miami Beach has used this report and data to support their approach to planning for sea level rise.
- We installed a network of water level measurement devices as part of large (about 2,000 acre) coastal marsh restoration project. The water level meters were used as part of a tidal evaluation study that compared on-site tidal response to long term tidal stations. This allowed us to develop a predictive tool that used historical data to assist in the design of water control structures thereby by creating a resilient design for long term marsh sustainability.
- Staff gauges are regularly designed and installed as part of our evaluation of water levels on projects such as the TM Ranch wetland mitigation bank where we designed the hydrologic patterns of the restored wetlands. We have also collected data for wetland restoration design for the Sheridan Street Natural Area and as part of implementation of a portion of the West Lake Park restoration construction.

33. Wetland and Wetlands Landscape Design: RES' multidisciplinary staff designs wetland, transitional and upland habitats utilizing our knowledge of South Florida soils, elevations, vegetation and hydrology. We have experience designing freshwater and tidal systems that incorporate diverse, appropriate vegetation and that improve aesthetics and habitat functionality. Whether the purpose of the project is to restore an existing natural system, to enhance wetland function for a mitigation project or to beautify a stormwater feature or park, RES will find creative ways to maximize the conditions within a site for optimum benefit. Some example projects are described below.



- RES designed native transitional and upland habitat adjacent to a tidal tributary of Biscayne Bay at the historic Vizcaya Museum and Gardens. The planting area was adjacent to the café and pool area and thus highly visible. The design incorporated diverse, dense plantings of different sizes so that the area looked natural immediately after installation. It also screened neighboring properties from visitors. RES provided construction oversight for this project.
- We designed improvements to a drainage ditch in Indian River County that had eroded over time and was encroaching on neighboring properties. Mangroves had colonized the ditch and required mitigation for removal. RES developed a self-mitigating system acceptable to federal and state agencies that incorporated mangrove shelves at appropriate elevations, as well as transitional vegetation along the banks to prevent erosion. The system was designed to create habitat, minimize maintenance (i.e. no sod) and hold the integrity of the ditch during storm events. RES provided construction oversight for this project.

34. Pond Design: RES' stormwater design projects have been largely focused on improving older infrastructure so that it can meet current regulatory requirements. An example of this is the Autumn Woods project. The Autumn Woods project was a retrofit of an older system that conveyed untreated stormwater into the Eau Gallie River. RES designed stormwater improvements consisting of an improved drainage system with wet detention to treat stormwater and improve water quality by reducing nutrient concentrations prior to discharge to this coastal waterway.

35 Nutrient Removal Calculations for Stormwater Systems: RES has extensive experience providing nutrient (i.e., total nitrogen and total phosphorus) removal calculations. Several years ago, RES was part of a team (as a subcontractor) that successfully prepared a 319 grant for the City of Fort Lauderdale (jointly with the SFWMD) for installation of a pollutant control structure for a major outfall to the North Fork of the New River. Among the tasks for which RES was responsible was



calculating the nutrient removal efficiencies of the various technologies proposed. More recently, our experience has expanded, as we are the prime consultant for FDOT Districts One, Three, Four, Five and Seven NPDES compliance contracts. In this role, we continue to support them with nutrient removal load reduction calculations, such as:

- Annually estimating the nutrient load reductions resulting from street sweeping conducted by FDOT and their contractors, for reporting to FDEP for the Broward County and Palm Beach County Phase I NPDES MS4 permits.
- Estimating the nutrient load reductions above regulatory requirements for over 30 FDOT stormwater systems in order to receive nutrient removal credit in basins with TMDLs undergoing BMAPs. Information provided to FDEP includes tabulation of project information such as project footprint (acres), treatment type (e.g. exfiltration trench, wet detention pond) and size, treatment basin size, nutrient loading and nutrient removal (typically in pounds). RES also submits GIS layers for the project and treatment areas.

RES regularly uses FDEP's Pollutant Load Screening Model as well as their "Evaluation of Current Stormwater Design Criteria within the State of Florida" (aka the "Harvey Harper" report) for estimating nutrient removal. Successful use of these models requires not just an understanding of the components that contribute to nutrient loads (e.g. hydrology, rainfall, land use) but also expertise in interpreting stormwater design information (plans, drainage reports, permit information) and converting the information into GIS layers and geodatabases.

RES developed a Stormwater Quality Master Plan for the City of Melbourne. Much of the City's stormwater system was constructed before the implementation of more recent water quality treatment regulations that are in place. As a result, a considerable portion of the City discharges stormwater directly into the Indian River Lagoon (IRL) which has adopted TMDLs, without treatment. Additionally, many of the high-runoff areas have very limited land available to construct traditional water quality best management practices such as stormwater ponds. These factors provide a significant challenge for the improvement of water quality prior to discharge. The water quality master plan was designed to address the nutrient reduction obligations established in the IRL BMAPs and provide recommendations for stormwater quality improvements. A primary objective of this Master Plan was to identify water quality improvement projects that would improve the quality of stormwater discharge from the City and optimize nutrient removal to address existing and future regulations. Project development recommendations focused on the areas within the City with the highest concentration of pollutant loads. Existing and proposed Engineering, Public Works, and CRA projects were evaluated to determine if additional water quality treatment might be incorporated into project designs. Potential projects were evaluated from a cost-vs.-benefit perspective and included cost per pound of nutrients removed. Non-structural water quality improvement projects were also evaluated, which include potential changes to development regulations, a modified street sweeping program, enhanced education programs, and other similar initiatives. A total of 46 projects were developed and ranked to determine the most cost efficient and effective for pollutant removal.



36. Low Impact Stormwater System Design: Low impact design integrates stormwater management strategies that generate less runoff and involves strategic and customized controls to manage pollutant load, peak flows and volumes to reduce the impact of stormwater. Some of the projects resulting from the Melbourne water quality master plan have incorporated many of the design concepts of low impact design. These have included rain gardens, underground retention and the use of pervious pavement and other modern stormwater design concepts. One example project design was the Highland Avenue Parking Lot project that RES designed. This project used PaveDrain® permeable articulating

concrete block system. This is a similar system used by the City at Gore-Betz Park and the Orchid Parking lot next to City Hall. The PaveDrain® Company features our Highland Avenue Parking Lot as one of their corporate success stories.



Tab 4 Qualifications of the Project Team

Key Staff/Scope Experience Matrix

The matrix below visually displays the key staff members of the project team and the scope items for which they have the experience and qualifications to lead. These six individuals will serve as the Project Managers for individual tasks under this contract, depending on the specific scope item(s) requested.

Role	RES TEAM						AirQuest	Eurofins
	Rachel Vitek, GISP	Nadia Locke, PE, LEED AP	Gayle Stone, MS	Kathryn Eisnor, LEP	Patrick Shearer, PE	Megan Reising, MS		
Role	Contract Manager	QA/QC Manager	Senior Scientist	Senior Scientist (Environmental)	Senior Engineer (Water Resources)	Senior Scientist (Ecological)	Industrial Hygiene	Lab
Years of Experience	15	37	31	19	18	12	23	68
Major License/Certifications	GISP	PE/LEED AP	N/A	LEP	PE	AAUS Diver	IAQ	NELAP
Previous Experience on Fort Lauderdale Projects	●	●	●	●	●		●	●
1. Permitting & meetings.	●	●	●	●	●	●		
2. Written/verbal reports	●	●	●	●	●	●		
3. Grant services/support	●	●	●	●	●	●		
4. Ordinances & guidelines review, amendments & development	●	●	●	●	●			
5. Regulatory Compliance	●	●	●	●	●	●	●	
6. Environmental measurements	●	●	●	●	●	●	●	
7., 14., 16. & 17. Asbestos, lead-based paint, radon, mold & IAQ		●		●			●	
8. Phase I & Phase II ESAs		●		●			●	●
9., 11., 12., & 13 Soil, groundwater, sediment & atmospheric assessment & remediation plans	●	●	●	●	●		●	●
10. Dewatering plume calculations for drawdown effects		●		●	●			
17. Brownfield compatibility legislation studies		●		●				
18. Storage tank contamination testing & evaluation		●		●			●	



	RES TEAM							
	Rachel Vitek, GISP	Nadia Locke, PE, LEED AP	Gayle Stone, MS	Kathryn Eisor, LEP	Patrick Shearer, PE	Megan Reising, MS	AirQuest	Eurofins
19. Endangered and/or threatened species evaluation & relocation	●	●	●	●	●	●		
20. Inspection services to monitor contamination & remediation activities	●	●		●			●	
21. Design remediation systems related to contamination.		●		●				
22. Carbon Foot Print audits for select facilities or infrastructure.		●			●			
23. Sustainability evaluation reports.		●			●			
24. Wetland delineations.		●	●	●		●		
25. Environmental / social justice evaluations		●	●	●				
26. Water Quality evaluations.	●	●	●	●	●	●		
27. Historical and archeological reviews.		●	●	●				
15. & 28. HUD/NEPA environmental assessments and remediation plans.		●	●	●				
29. Benthic surveys.		●	●	●		●		
30. Prepare permit applications for seawalls, canals & dredging.	●	●	●		●	●		
31. Groundwater observation wells.		●		●				
32. Tide gauges.		●	●		●	●		
33. Wetland and wetlands landscape design.		●	●		●			
34. Pond design.		●			●			
35. Nutrient removal calculations for stormwater systems.	●	●			●			
36. Low impact stormwater system.		●			●			
37. Greenhouse gas inventories.		●		●				
38. Similar services not specifically listed.	●	●	●	●	●	●	●	●
39. Laboratory services.							●	●



Key Staff Resumes

Resumes for the key staff and team members listed in the above matrix including education, experience, licenses, and other pertinent information is included below starting with RES key staff.



Rachel Vitek, MS, GISP

Senior Scientist

Ms. Vitek specializes in NPDES permit implementation, GIS production and analysis, and database management. She provides support for the FDOT District Four and multiple municipalities in the implementation of their NPDES programs. Compliance with their Phase I and Phase II MS4 NPDES permits includes stormwater treatment facility and outfall inspections, maintenance yard inspections, maintaining and/or creating an inventory of stormwater system components in GIS, coordination with agencies and co-permittees, TMDL and BMAP support, and preparing Annual Reports for submittal to the FDEP. Ms. Vitek’s prior experience with the Arizona Game and Fish Department involved supporting the wildlife connectivity project conducted throughout the state.

SELECT WORK EXPERIENCE

Tarpon River Environmental Assessment, City of Fort Lauderdale, Broward County, Florida

Ms. Vitek managed a project for the City of Fort Lauderdale, assisting in the environmental assessment and clean up from a sanitary sewer line break that resulted in an effluent discharge into the Tarpon River. Since the Tarpon River is tidally influences, the effects to the water column were mitigated quickly, therefore we focused our efforts on the solids that may have been deposited at the bottom of the river. Ms. Vitek and the RES team took strategic core samples of the sediment at the bottom of the river to determine the extent to which the solids may remain. Ms. Vitek coordinated closely with the laboratory to run processes that are typically performed in water samples, on the sediment samples from the cores. With the results, Ms. Vitek determined the area of the river to be dredged and worked with the City to prepare the Stormwater Pollution Prevention Plan (SWPPP) and dredging plans for the contractor.

Himmarshee Canal Environmental Assessment, City of Fort Lauderdale, Broward County, Florida

Ms. Vitek managed a project for Fort Lauderdale, assisting in the environmental assessment and clean-up from a sub-aqueous sanitary sewer line break that resulted in an effluent discharge into the Himmarshee Canal. Since the Himmarshee Canal is tidally influences, the effects to the water column were mitigated quickly, therefore we focused our efforts on the solids that may have been deposited at the bottom of the river. Ms. Vitek and the RES team took strategic core samples of the sediment at the bottom of the river to determine the extent to which the solids may remain. Ms. Vitek coordinated closely with the laboratory to run processes that are typically performed in water samples, on the sediment samples from the cores. With the results, Ms. Vitek determined the area of the Canal to be dredged and worked with the City to prepare the SWPPP and dredging plans for the contractor. In addition, Ms. Vitek’s team performed turbidity monitoring during dredging due to the sensitive location of the dredge work.

NPDES Permit Support, City of Fort Lauderdale, Broward County, Florida

Ms. Vitek assists Fort Lauderdale with implementation of their NPDES MS4 permit issued by FDEP. Tasks include assisting with the preparation of and reviewing the FDEP annual report and back up documentation, preparing and assisting with developing and maintaining the NPDES SOPs, responding to requests for additional information from FDEP regarding annual report data and audit materials, updating TMDL status information, and updating annual assessment program information.

AT A GLANCE.

Email

revitek@res.us | 754.778.0504

Years of Experience

15 years

Education

- MS, Geographic Information Systems, Florida State University, 2010
- BS, Environmental Studies, Florida State University, 2009

Certificates | Licenses

- Certified Geographic Information System Professional (GISP) No. 67671
- Certified FDEP Stormwater, Erosion and Sedimentation Control Inspector #25438 and Instructor #689

Additional Information

- The Florida Association for GIS Professionals – Member
- FSA, Membership Committee (2014)
- South Florida GIS Expo Committees (Committees: Marketing/Social Media, 2014; Volunteer Chair, 2015, 2016, 2017, 2018, 2019)



In addition, Ms. Vitek coordinates with Broward County for implementation of tasks that are covered under the JPA with the County, such as pollutant loading analysis.

NPDES Assessment Program, City of Fort Lauderdale, Broward County, Florida

Ms. Vitek assisted Fort Lauderdale on preparation of their Assessment Program as required by the NPDES MS4 Phase I Cycle 4 permit. This included working with the city to determine what programs were already in place that could comply with the Assessment Program requirements and how to incorporate them moving forward. The plan was prepared and submitted to FDEP and approved.

Bacterial Pollution Control Plan Assistance, City of Fort Lauderdale, Broward County, Florida

Ms. Vitek provided technical support and management for preparation of the BPCP in accordance with Part VIII of Broward County's Cycle 4 NPDES MS4 permit. RES prepared a comprehensive list of stakeholders that included not only the municipalities, but also Broward County, local Water Control Districts, SFWMD, and FDEP. Invitations were sent to all stakeholders for the kickoff meeting, which was well attended. RES prepared an overview of the BPCP process that was presented at the kickoff meeting to ensure attendees understood the regulatory requirements and the goals of the meeting. The kickoff meeting included a "maps-on-the-table" breakout session, where meeting attendees broke out into two groups, and marked on oversized maps of the TMDL watershed (prepared by RES) locations that may be a source of fecal coliform contamination. These potential sources were then visited during the "Walk the Waterbody" (WTW) exercise. The results of the kickoff meeting, maps-on-the-table and WTW exercises were compiled into a joint BPCP for submittal to FDEP.

Wingate Landfill Burrowing Owl Survey and Excavation, City of Fort Lauderdale, Broward County, Florida

Ms. Vitek assisted in the creation and use of a camera that was used to scope burrowing owl burrows. Following the scoping, she provided research and coordination support on burrow excavation and assisted with the excavation of the burrows of concern.

River Oaks Preserve Tree Survey, Fort Lauderdale, Broward County, Florida

Ms. Vitek participated in a tree survey for Fort Lauderdale's River Oaks Preserve area. This included identifying trees, gathering information, and using a GPS Trimble unit to track the locations.

NPDES MS4 Permit Implementation and Coordination, FDOT District Four, Florida

In accordance with FDOT District Four's Phase I and Phase II MS4 NPDES permits, Ms. Vitek provides technical oversight and managerial support for inspections of stormwater treatment facilities and outfalls to identify functional defects and the inspection of the District Operations Centers to verify that the BMPs are operational and to determine changes necessary to improve runoff quality. This includes the review of as-built plans, SFWMD ERPs, various property appraiser web maps, and/or historical aerial data. Additional tasks performed include coordination with agencies and co-permittees, preparation of Annual Reports for submittal to the FDEP, providing training (Illicit Discharge, Pollution Prevention, Sediment and Erosion Control), researching easements for stormwater facilities, communicating regularly with the Operations Centers and holding annual meetings with them, on maintenance and reporting issues, drainage connection permit tracking, IDDE research and tracking, and developing and updating SOPs for various components of the NPDES permit. Ms. Vitek participates in multiple Central Office working groups on behalf of District Four including Maintenance Guide for Stormwater Assets, Stormwater Asset Management System, Statewide Stormwater Management Plan update and participated in the Phase I Cycle 5 permit working group with FDEP.

NPDES Support, City of Weston, Broward County, Florida

Ms. Vitek compiled information for and prepared the City of Weston's NPDES MS4 Cycle 3 Years 3, 4, and 5/6 and Cycle 4 Years 1 through 7 NPDES annual reports. This included coordination with multiple departments to obtain information, review the information for completeness, review required attachments, review previous submittals and feedback from FDEP to ensure requested data was included and prepared the electronic submittal to FDEP. Ms. Vitek continues to provide general NPDES support for the City of Weston. Ms. Vitek also assisted in preparation of the required Prioritization Plan, Assessment Program Plan, and Bacterial Pollution Control Plan.

In-House Environmental Support Services, FDOT District Four, Florida

Ms. Vitek provided in-house consulting for FDOT District Four Planning & Environmental Management reviewing initial, constructability, and biddability plans for potential environmental concerns and prepares environmental features memos including the identification of wetland areas, listed species, water quality, Section 4(f) areas, archaeological areas, social areas, and contamination concerns.



Nadia G. Locke, PE, LEED AP

Senior Environmental Engineer

Ms. Locke has been providing professional environmental and engineering consulting services for over 30 years. During her career, she has worked in many facets of environmental consulting including PD&E Studies, environmental audits, site assessment and remediation, stormwater design, sanitary sewer planning, environmental permitting, climate change impact evaluation, grant assistance, wetland mitigation design, endangered species relocations, Brownfields, community involvement, and training. Ms. Locke has provided litigation support for the FDOT, Miami-Dade Aviation Department, Barry University, and private entities.

Ms. Locke is currently serving on the Boards for the Fort Lauderdale Riverwalk, SGP and FBA Environmental Justice Foundation. Ms. Locke is former Chair/President of the SGP, FBA, and South Florida Association of Environmental Professionals. She served as a commission-appointee to the Broward County Brownfields Redevelopment Task Force and on the Community Advisory Board for the Broward County MPO.

SELECT WORK EXPERIENCE

General Environmental Engineering Services, City of Fort Lauderdale, Broward County, Florida

Ms. Locke is the contract manager and has provided QA/QC for our contract for general environmental engineering consulting services for the City of Fort Lauderdale. Services conducted include emergency response; Phase I and Phase II ESAs; wetland surveys/monitoring, endangered species surveys and relocation permitting; benthic (seagrass) surveys; IAQ / asbestos surveys, NEPA assessments for federal funding, contamination assessment and remediation planning.

NEPA Documentation, City of Fort Lauderdale, Broward County, Florida

Ms. Locke has been the project manager and provided QA/QC for many NEPA projects to support the City of Fort Lauderdale's environmental program as they seek CDBG funding from HUD to improve quality of life through neighborhood enhancement projects. RES conducted environmental reviews and prepared the NEPA Statutory Worksheets for projects that are categorically excluded under NEPA, such as decorative street name posts, entryway monuments, brick paver crosswalks, decorative lighting and landscaping. The preparation of this worksheet requires coordination with environmental regulatory agencies, including the State Historic Preservation Office, the FDEP, and the EPA. The Statutory Worksheet includes a Determination section with three options. If the project does not require mitigation for compliance with listed statutes or authorities, nor require formal permit or license, then it converts to Exempt status. Several of these projects have been elevated to a class of action determination of Environmental Assessment. Project effects evaluated include sociocultural, natural and physical environmental resources.

Isle of Palms Seawall 15 Replacement and Climate Change Adaptation, City of Fort Lauderdale, Broward County, Florida

Ms. Locke was the project manager for the support that RES provided to the City for replacement of 900 feet of seawall along the west side of Isle of Palms Drive. Sea level rise had caused surface waters to overtop this seawall and flood adjacent land and roads. The purpose of the project was to raise the height of the seawall and protect the shoreline from the effects of climate change. The City engaged RES to conduct a benthic survey to support the design and permitting. Seagrasses were identified and data regarding seagrass bed size, density, incidental species observed, and substrate conditions were recorded and documented. RES collaborated with the design engineers to assist them in obtaining the regulatory agency permits and to inform the construction procurement process. The report was delivered one week before the contract schedule and under budget. A second, post construction survey was conducted after the seawall was constructed for permit closure.

Tarpon River Environmental Assessment, City of Fort Lauderdale, Broward County, Florida

RES provided services for the Tarpon River Restoration following a 54" sanitary sewer force main break in the Rio Vista neighborhood. Our team identified the impacted area, developed a restoration plan, and implemented rigorous field

AT A GLANCE.

Contact

nlock@res.us | 954.937.9678

Years of Experience

37 years

Education

- BS, Materials Science and Engineering, University of Florida, 1988

Certificates | Licenses

- Registered Professional Engineer, Florida #58676 | Received: 2002
- LEED AP Neighborhood Development
- Certified FDEP Stormwater, Erosion, and Sedimentation Control Inspector #3263 and Instructor #130
- OSHA 40 Hour HAZWOPER / 8 Hour Site Supervisor
- PADI Advanced | NAUI Open Water Diver



investigations, including sediment coring, water quality sampling, benthic and hydrographic surveys. We worked closely with USACE, FDEP, and Broward County to streamline permitting and guide sediment removal planning. RES also supported the City with bidding documents, contractor selection, and compliance inspections during restoration. Weekly progress updates were delivered to ensure transparency with residents, and the restoration was successfully completed. Ms. Locke was the QA/QC Manager for this project.

Wingate Landfill Opinion of Post Closure Costs, City of Fort Lauderdale, Broward County, Florida

In response to a City audit, the City of Fort Lauderdale hired RES to develop an opinion of post-remediation costs for this Superfund site. Historic and future operations and maintenance and monitoring costs were compiled in several spreadsheets to provide future annual allocations until fiscal year 2010. Ms. Locke created the spreadsheets such that the cost forecasts may be updated annually.

Wingate Landfill Burrowing Owl Evaluation, City of Fort Lauderdale, Broward County, Florida

The Wingate Landfill is a hazardous waste Superfund site that has undergone regulatory closure. A permit condition of the closure requires monitoring of the groundwater, surface water and fish tissues on a periodic basis. During a five-year inspection, the EPA identified the presence of two burrowing owl burrows on top of the capped area of the landfill. RES was engaged to evaluate the possible damage to the landfill liner and coordinate burrow removal with state and federal regulatory agencies. RES removed the burrows and worked with the City to encourage successful relocation of burrows to outside of the cap area. The work was conducted during nesting season so RES but the burrow removal was allowed by the agencies due to the potential hazard that a landfill cap breach could cause. Therefore, RES coordinated with an incubator in case fledglings were identified. As project manager, Ms. Locke provided technical oversight and regulatory coordination between the EPA and FWC.

Pre-Demolition Asbestos Surveys for Low Level Bridges, City of Fort Lauderdale, Broward County, Florida

Ms. Locke was the project manager for asbestos surveys on three bridges in Fort Lauderdale. The survey scope and reports were coordinated with FDOT District Four PL&EM Department staff in order to satisfy FDOT requirements and project needs, as FDOT was providing funding for the demolition and reconstruction of these bridges.

Sistrunk Boulevard Streetscape and Enhancement, City of Fort Lauderdale, Broward County, Florida

Originally slated as a stimulus project where funds were being disbursed through FDOT District Four, Ms. Locke conducted a Level 2 contamination assessment of a 1.25-mile corridor streetscape enhancement project located in the heart of the City of Fort Lauderdale CRA. Testing included Maintenance of Traffic, private utility location and collection of 36 soil and groundwater samples for laboratory analysis. Data was compiled and reported, and environmental notes/bid specification language was developed for bidding purposes. Ms. Locke also engaged the CRA in avoidance and minimization considerations and assisted the CRA with managing risks associated with environmental issues during construction.

River Oaks Preserve Stormwater Park, City of Fort Lauderdale, Broward County, Florida

The purpose of the project was to create a passive stormwater park with wetland features to relieve flooding in the River Oaks neighborhood and provide recreational use for local residents. Ms. Locke provided engineering support for the wetland delineation and tree survey, master site planning, and permitting for this stormwater park. She also assisted with the development of a summary of funding and grant opportunities for the project. The park preserved and enhanced existing forested wetlands on site and restored herbaceous wetlands to a stormwater pond/filter marsh community to alleviate flooding in the River Oaks neighborhood.

Pompano Beach CRA Continuing Contract for Environmental Engineering Services, City of Pompano Beach, Broward County, Florida

Ms. Locke is the contract manager for this contract. RES conducted Phase I and Phase II ESAs for several parcels in preparation for the CRA's redevelopment planning. Ms. Locke is working with the CRA to consider options on how to safely manage construction on a solid waste disposal site and prepared environmental documentation to satisfy NEPA on a Local Agency Program (LAP) project to satisfy FDOT's requirements.

Design Build SR-9/1-95 Express Lanes and Ramp Signals-Phase 3A-1, FDOT District Four, Florida

Ms. Locke was the project manager for the environmental tasks associated with this design-build project. Under this scope, RES provided assistance with permit modifications, contamination review, wetland impact analysis and dewatering permitting. RES conducted the analysis and prepared the permitting documents so that dewatering could be performed under District Four's Master Dewatering Permit.



Gayle L. Stone, MS

Senior Scientist

Ms. Stone is an environmental consultant and ecologist. Her main areas of expertise include preparation of NEPA documents, wetland delineations, wetland functional assessments, protected species surveys and environmental permitting. She has participated in numerous PD&E Studies for the FDOT and performed Environmental Assessments and Categorical Exclusions for municipalities, city housing authorities, community redevelopment agencies and county transportation agencies. Her additional project experience includes benthic/seagrass surveys, bird surveys, tree surveys, wetland and wildlife monitoring and construction permit compliance inspections.

SELECT WORK EXPERIENCE

General Environmental Engineering Services, City of Fort Lauderdale, Florida

The City of Fort Lauderdale seeks CBDGs from the HUD to improve quality of life through neighborhood enhancement projects. Ms. Stone conducts environmental reviews and prepares the NEPA Statutory Worksheets for projects that are categorically excluded under NEPA, such as decorative street name posts, entryway monuments, brick paver crosswalks, decorative lighting and landscaping. She also assisted the City of Fort Lauderdale with an Area-Wide Floodplain Management Eight-Step Decision Making Process by developing a flow chart for types of projects that have a negligible effect on the environment. The Process included preparing early and final public notices for publication and recommending the implementation of standard industry protocols to minimize potential adverse impacts within the floodplain.

Tarpon River Restoration, City of Fort Lauderdale, Broward County, Florida

RES has been engaged by the City of Fort Lauderdale to develop a restoration plan for sediment/debris removal (dredging) following wastewater discharges into the Tarpon River. Ms. Stone coordinated with the environmental regulatory agencies and advised on the requirements for environmental permitting, including justification for maintenance dredging, overseeing design and methods for a benthic/seagrass survey using video, and development of a dredging plan, including measures for turbidity control and protected species. A Letter of Permission from the USACE, a Maintenance Dredging Exemption from FDEP and an Environmental Resource License from Broward County Environmental Protection and Growth Management Department will be acquired for the restoration.

Wingate Landfill Burrowing Owl Evaluation, City of Fort Lauderdale, Broward County, Florida

The Wingate Landfill is a hazardous waste Superfund site with resident Florida burrowing owls. During a five-year inspection, the EPA identified two burrowing owl burrows on top of the capped area of the landfill and directed the City to remove the burrows and evaluate the integrity of the landfill cap. Ms. Stone designed a remote video scope to assess if the owls had affected/damaged the protective cap and/or nested in the burrow. No eggs or flightless young were present. After multi-agency coordination, the burrows were excavated, and it was apparent they did not extend down to the cap.

River Oaks Preserve Stormwater Park, City of Fort Lauderdale, Broward County, Florida

The purpose of the project is to create a passive stormwater park with wetland features to relieve flooding in the River Oaks neighborhood and provide for passive recreational use. Ms. Stone performed the wetland delineation and assisted with master site planning to preserve and enhance forested wetlands on site and restore herbaceous wetlands to a filter marsh community. The recreational portion of the project includes relocating an historic railroad bridge to the site as part of a natural boardwalk.

Fort Lauderdale CRA NW 7th/9th Avenue Connector Reevaluation, City of Fort Lauderdale, Broward County, Florida

As a subconsultant, Ms. Stone prepared a NEPA Reevaluation due to an alignment shift in a segment of the NW 7th/9th Avenue Connector between Sistrunk and Sunrise Boulevards. Land use, contamination, pond siting, cultural resources and public involvement were included in the NEPA documentation.

AT A GLANCE.

Contact

gstone@res.us | 954.484.8500

Years of Experience

31 years

Education

- MS, Marine Biology, Nova Southeastern University, Fort Lauderdale, Florida, 1997
- BA, Biology and Music Double Major, Skidmore College, Saratoga Springs, New York, 1987

Certificates | Licenses

- PADI Scuba Certified No. 9111278063



Districtwide Mitigation, Wildlife and Environmental Support Services, FDOT District Four, Florida

Ms. Stone assists the project manager with the diverse tasks associated with this contract including reviewing project deliverables such as NREs, NRE Tech Memos, Benthic Survey Reports, Florida bonneted bat Survey Reports, and other mitigation and wildlife deliverables.

Avant Garde Sidewalk LAP Project, City of Hollywood, Broward County, Florida

This is a sidewalk improvement project related to the Safe Routes to School program for the Avant Garde Academy in Hollywood, Florida. The project included the design and NEPA evaluation for completing the missing sections of concrete sidewalks along both sides of roads for a total of 13,225 linear feet in 26 different blocks within 0.71 miles of the school. RES' role on this project was to evaluate sociocultural, contamination, natural resources and other environmental resource project effects. The environmental document was a CatEx 2, with back up memos for each environmental resource. Ms. Stone was the senior scientist and provided coordination with the FDOT on the NEPA compliance documentation.

Pompano Beach CRA Broward Community and Family Health Center, City of Pompano Beach, Broward County, Florida

Ms. Stone completed the Environmental Information and Documentation Checklist in support of obtaining a federal grant from the U.S. Department of Health and Human Services, Health Resources and Services Administration for construction of a new health care center in this transit-oriented Community Redevelopment Area.

Martin Luther King, Jr. Boulevard Environmental Review, Broward County, Florida

Ms. Stone completed the Type I and Programmatic Categorical Exclusion (CE) Checklist and CE Memo for this streetscape improvement project between NW 31st Avenue and Powerline Road. This project is one segment of a planned, multi-city education corridor partially funded through the FDOT LAP. The environmental review included coordination with the State Historic Preservation Office regarding a potentially historic site and an inventory of community and cultural resources. Ms. Stone also assisted with the preparation of letter mailings to residents and businesses along the project corridor for public involvement.

ETDM Support for I-95/ Broward Boulevard Interchange, Broward County, Florida

Ms. Stone provided technical support to FDOT for the Districtwide ETDM Support contract. For this project, Ms. Stone compiled the data from the Environmental Screening Tool and entered it into the ETDM screen. She also assisted in preparing the Preliminary Environmental Discussion.

Markham Park Target Range, City of Sunrise, Broward County, Florida

The purpose of the project is to perform reclamation of the lead shot and clay target fragments at a target and rifle range in a 665-acre recreational park. The project involves filling a 12.6-acre area to grade to aid in future reclamation activities. Ms. Stone performed the wetland delineation and is acquiring permits from USACE, SFWMD and Broward County.

Beach Corridor Strategic Miami Area Rapid Transit (SMART) Program, Miami-Dade County, Florida

This project is a continuation of the NEPA process from the Tier I Evaluation, in which alignments for the Beach Corridor were selected. The alignments include a Bay Crossing, or Trunk Line, on MacArthur Causeway from Miami to Miami Beach, a Miami Extension to the Design District on Miami Avenue, and a Miami Beach Extension on Washington Avenue from 5th Street to the Miami Beach Convention Center. Ms. Stone was the lead Senior Scientist for this project. Ms. Stone prepared the Sociocultural Effects Evaluation to submit as part of the ETAT comments in ETDM. For the draft NEPA documents for the PD&E Study, Ms. Stone prepared the Natural Resources Evaluation, the Sociocultural Effects Evaluation and the NEPA Checklist for Federal Transit Administration (FTA) funding.

SR 9/I-95 at Woolbright Road Interchange PD&E Study, FDOT District Four, Palm Beach County, Florida

The project involves reconfiguring the interchange at I-95 and Woolbright Road to improve traffic flow and provide for increased capacity and traffic circulation. In addition, bicycle lanes will be provided to allow for increased usage and safety. Three interchange alternatives were evaluated. One of the proposed alternatives included ROW acquisition of residences and a neighborhood preschool. Ms. Stone prepared the Sociocultural Effects Evaluation for the project and evaluated the project's potential effects on the socioeconomic vitality of the community.



Kathryn D. Eisnor, LEP

Environmental Division Manager / Senior Scientist

Ms. Kathryn Eisnor is an environmental professional with a wide range of experience in the environmental industry. She has managed and executed a wide variety of environmental projects that are multi-faceted and include elements such as: Phase I and Phase II ESAs; emergency response and clean-up of petroleum and other hazardous substances; indoor air quality assessments, safety training and industrial hygiene evaluations including noise studies, odor complaint evaluations, site assessment, remediation and redevelopment of contaminated properties. She also has experience with NEPA evaluations for a variety of federal agencies including the EPA, Bureau of Indian Affairs, HUD, FDOT, Indian Health Services, FWS, Health Resources and Services Administration and USACE, which included working with members of these federal departments to complete the evaluations. Management and oversight of mold assessment and remediation in hotels and commercial buildings as well as residential mold remediation; and asbestos inspections for due diligence, demolition, and asbestos hazard emergency response act inspections in schools. Additionally, Ms. Eisnor has worked on many projects that involve Tribal sovereignty issues with both Federal and local agencies as part of the NEPA evaluation on tribal land and adjacent to or near Tribal land where proposed activity would have a direct or indirect effect on Tribal land.

SELECT WORK EXPERIENCE

General Environmental Engineering Consulting Services, City of Fort Lauderdale, Broward County, Florida

RES holds a consulting contract to conduct miscellaneous environmental services for the City. Services conducted include emergency response to contamination identification during construction of a fire station; environmental reviews to comply with HUD CBDG requirements; Phase I and Phase II ESAs; Opinion of post landfill closure costs; contamination assessment and remediation design; asbestos and indoor air quality surveys; development of construction documents for working in contaminated areas; endangered species surveys, permitting and relocation; benthic surveys, NPDES (stormwater permit) support; and grant support. Under this contract Ms. Eisnor has provided project management and technical oversight of several contamination-related projects.

Fire Station #49 Emergency Response, City of Fort Lauderdale, Broward County Florida

Ms. Eisnor was the site manager when the City requested help determining the appropriate course of action in dealing with potentially contaminated soils and groundwater and conducted air testing at the site to monitor the construction workers' exposure to petroleum. City of Fort Lauderdale was constructing a new fire station and encountered a petroleum odor in soils while installing a stormwater system. Staff working at the site complained about the odor. This included soil and groundwater testing as well as continuous air monitoring during the installation of the drainage system and collection of air samples for analysis at a laboratory. The source of the contamination was not found in historical reviews or the construction activities on the site.

Phase I/II ESAs, Various Clients, Various Locations, Florida

Ms. Eisnor has managed, conducted or reviewed Phase I ESAs for sites located throughout Florida on a variety of sites from vacant agricultural, entire residential and mixed communities, industrial properties, and golf courses. She has also conducted peer review for reports completed by others for a site in Russia and one in Costa Rica to assist the bank lender.

AT A GLANCE.

Contact

keisnor@res.us | 954.464.4564

Years of Experience

19 years

Education

- BSc, Earth Sciences, Dalhousie University, 2002
- Indian Country Environmental Hazard Assessment, United Tribes Technical College, 2012

Certificates | Licenses

- Licensed Environmental Professional #370

Additional Information

- 40-Hour OSHA HAZWOPER Training
- 10-Hour OSHA Construction Training
- 8-Hour OSHA Health and Safety Refresher Training
- 8-Hour OSHA Site Supervisor Training
- 8-Hour OSHA Incident Commander
- 24-Hour Emergency Response Technician
- HAZWOPER Train-the-Trainer
- CPR and First Aid
- Indian Country Environmental Hazard Assessment Program
- USACE Jacksonville District Corps of Engineers, Regulatory Division Federal Wetland Delineation and Jurisdiction
- FDEP Stormwater, Sediment, Erosion Control Inspector #21246 and Instructor # 588
- FEC Railway Worker Protection Training
- RTA Contractor Safety Training



NEPA Review Sistrunk Boulevard Resurfacing and Sidewalk Improvements, City of Fort Lauderdale, Broward County, Florida

At the request of the City of Fort Lauderdale, Ms. Eisnor served as project manager on a Florida Department of Economic Opportunity for the Division of Community Development NEPA project review for a section of Sistrunk Blvd from SW 18th Avenue to just west of N. Andrews Avenue.

Hollywood Beach Park Mooring Field Construction, Broward County, Florida

This project started as a due diligence project conducting sediment sampling and conducting a reuse plan for soils that were to be dredged from the cove where the new mooring field was to be constructed. Following sediment characterization, RES conducted a benthic survey of both the north and south coves to support the FDEP, Broward County and USACE permitting that was needed for dingy dock construction in both the north and south coves. Once construction occurred, RES conducted environmental oversight on behalf of Broward County to ensure that the permit requirements were followed, and the required turbidity monitoring was conducted in accordance with the permits. Ms. Eisnor was the project manager for all phases of the project.

I-95 Express 3C, FDOT District Four, Broward County Florida

Ms. Eisnor assisted the contractor with obtaining dewatering permits in an area adjacent to wetlands, surface waters, mitigation area, and contaminated site. Calculated radius of influence, submitted to SFWMD for review, managed requests for additional information from the agency and obtained the permit.

Palm Beach County Department of Housing and Economic Development Community-Wide Assessment Grant Generic Quality Assurance Project Plan, Palm Beach County, Florida

Ms. Eisnor was the project manager completing a Generic QAPP to support the Palm Beach County Department of Housing and Economic Development for a Community-Wide Brownfields Assessment Grant. A Generic QAPP was prepared that is consistent with the EPA Region 4 Brownfields Generic QAPP Template and the EPA Region 4. The Generic QAPP will be used as a basis for all environmental testing conducted under this grant and will therefore need to include relevant quality assurance information from all consultants and laboratories that will be conducting sampling and analysis on projects covered under this grant.

Miami Beach Convention Center Brownfield, City of Miami Beach, Miami-Dade County, Florida

In preparation of development of City-owned properties associated with the redevelopment of the Miami Beach Convention Center, RES conducted a Phase I ESA for several parcels of land. These parcels included a parking lot west of the convention center and the 21st Street Community Center and Bandshell north of the convention center. The Phase I ESA revealed the historic operation of a golf course on the project sites. This finding was identified as a REC based on the potential historical application of herbicides and pesticides on the ground. A Phase II ESA revealed soil and groundwater contamination. The City elected to implement an engineering control and source removal efforts as part of the development plan. RES is currently implementing an area wide assessment and regulatory closure strategy of the golf course that incorporates the convention center and multiple adjacent sites. Ms. Eisnor is providing management and technical support.

University of South Florida Brownfields Grant, Tallevast, Manatee County, Florida

As part of the University of South Florida Brownfields Assessment Grant with the University of South Florida (BF02D29422). The target area for this grant is the unincorporated Tallevast community in Manatee County, which has approximately 50 properties that are suspected to be contaminated with chlorinated solvents by the former American Beryllium Company, which manufactured beryllium machine parts, including components for nuclear warheads. Ms. Eisnor served as technological advisor and peer reviewer for the completion of 15 Phase I ESAs, attended community involvement workshops, reviewed information for public involvement and prepared documents for review of the BRAB, assisted in completion of historical documentation review and in Phase II scoping.

FDOT District Four In-House Support, District Contracts, Florida

Ms. Eisnor provided labor support for the Planning and Environmental Management section of FDOT District Four conducting NEPA evaluations to support the work program, conducting project re-evaluations, creating Request for Proposal language, plans reviews, Electronic Review Comments (ERC) Comments, primavera updates, StateWide Environmental Project Tracker (SWEPT), and reviewing Project Development and Environment (PD&E) documents (Contamination Screening Evaluation Report, Cultural Resource Assessment Surveys, Endangered Species Biological Assessment Reports, Wetland Evaluation Reports, etc.).



Patrick Shearer, PE

Senior Engineer

Mr. Shearer is a project manager and senior engineer with experience in civil, environmental and water resources engineering. His technical experience is rooted in nature-based habitat restoration, resiliency and urban stormwater retrofits, green infrastructure, and water quality improvement projects related to impaired rivers, bays, and estuaries. He has experience successfully completing environmental studies and analyses including watershed-based studies for hyper urbanized and environmentally sensitive areas, wetland mitigation banking documents and plans, hydrologic and hydraulic (H&H) modeling, stormwater / watershed management plans, shoreline stabilization and living shoreline plans, stream assessments, stream restoration plans, and water resource related technical reports. He is experienced in ecological restoration including wetland restoration, stream restoration, oyster restoration, and living shoreline projects in both freshwater and estuarine ecosystems, including the restoration and creation of tidal channels, and living seawalls for hyper-urban areas. Mr. Shearer has provided project management, planning, feasibility, engineering evaluation and design, survey and geotechnical testing coordination, modeling, permitting, and construction administration for the above types of urban and natural resource projects. He has experience in mitigation credit trading in wetlands and stormwater, carbon reduction, stormwater inspections, urban forestry, Florida Bonneted bat studies, wetland delineations, State and Federal stream and wetland permitting, SWPPPs, construction management, CEI services, environmental compliance support, NPDES, ERP, water use permitting, mining evaluations, and environmental compliance. Mr. Shearer is also experienced with regulatory evaluations for unique projects, alternatives analysis, preliminary and detailed engineering design, grant procurement, bidding assistance, and design peer reviews. He has designed living shoreline, flood protection, and water quality improvement projects which accommodate for sea level rise.

SELECT WORK EXPERIENCE

Jose Marti Park Adaptive Re-design, City of Miami, Miami Dade County, Florida

Mr. Shearer serves as Project Manager and Engineer-of-Record for the Adaptive Redesign of José Martí Park, a 13-acre historic park along the Miami River that will become the City's flagship resiliency and climate adaptation park. RES has lead stormwater, civil, and environmental engineering design, ecological surveys, permitting, agency coordination, community engagement, and grant support, helping secure more than \$18+ million in funding. The project features resilient infrastructure such as raised permeable pavements with underground treatment, tidal backflow prevention valves for existing outfalls, manatee grates on outfalls and manatee viewing platforms, hybrid grey-green shoreline-flood protection systems, living shorelines tied to the stormwater quality improvement, mangrove and oyster restoration, and public education components like a 360-degree riverfront outdoor classroom and visible stormwater filtration systems.

North Bay Village Civic Park Living Shoreline, North Bay Village, Miami-Dade County, Florida

RES has provided environmental engineering, living shoreline design, and resiliency planning services for North Bay Village's new waterfront civic park on Biscayne Bay.

The project, funded by FIND and FDEP grants, includes a kayak launch, picnic pavilion, nature trail, splashpad, and resilient shoreline improvements that meet the Village's updated seawall code while enhancing ecological function and public access.

AT A GLANCE.

Email

pshearer@res.us | 785.493.2919

Years of Experience

19 years

Education

- BS, Civil Engineering – Environmental Option; Natural Resources and Environmental Science, Kansas State University, 2007
- Integrated Stream and Stormwater Wetland Design in Urban Settings Class, Duke University, 2013

Certificates | Licenses

- Professional Engineer, FL #79596 | Received: 2015

Additional Information

- FDEP qualified Stormwater Management Inspector #34890
- NCSU Stream Restoration Program Certificate Completion, Raleigh, NC (2009)
- NCSU Tidal Wetlands and Stream Restoration Course, Beaufort, NC (2015)
- Toewood Design and Siting for Stream Restoration, USDA (2015)
- NCSU River Course 401: Construction Practices for Stream Restoration, Raleigh, NC (2013)
- Living Shoreline Design Workshops, Virginia Institute of Marine Science, Yorktown, VA (2011-2015)
- Member – American Society of Civil Engineers (2003 – Present)
- Board of Directors – ASCE Environmental and Water Resources Institute (EWRI), Miami-Dade Branch (2016 – 2022)
- Member – American Water Resources Association, since 2017



RES responsibilities include ecological assessments, permitting support, design coordination, and integration of nature-based solutions such as a living seawall and shoreline habitat features. Mr. Shearer has led coordination with coastal and structural engineers, landscape architects, permitting agencies, scientists, and university partners to advance the park's innovative design, and to meet the grant deadlines. His role emphasizes ecological restoration, stormwater and shoreline resiliency, grants, permitting, and community-focused amenities, positioning the project as a model for sustainable waterfront adaptation in Biscayne Bay and statewide.

Tree Tops Park Mitigation Design and Permitting, FDOT District Four, Broward County, Florida

Mr. Shearer was the project manager and is the lead engineer for this wetland mitigation project for District Four. The project has gone through several FDOT contracts, as it moves towards construction phase, and Mr. Shearer has lead the navigation of getting this project from concept to implementation. The 33-acre site is a county owned park, which will be developed to a wetland mitigation site in partnership with FDOT District Four. RES has been responsible for the design and permitting of the project, to achieve excess wetland mitigation credits for the district's sole use. The design team has utilized available LiDAR and acquiring supplemental topographic survey for site design purposes. RES delineated the site wetlands to determine and map areas which may be jurisdictional to state and federal agencies, for mitigation planning, and permitting purposes. GPS mapping was used to locate the areas delineated as wetlands and a natural resources report was prepared to document onsite resources and the quality of these resources for mitigation purposes. RES performed a tree inventory at the site to identify and map upland trees that should be preserved, map and document forestry species for permitting purposes, and to outline the areas of invasive species management needs. The site was found to be dominated by invasive species and managing these species will be a primary method of site enhancement activities. RES has prepared grading plans based on site topography, wetlands areas, invasives, evaluation of historic aerial photography and drainage manipulations onsite, and hydrologic and hydraulic evaluations. The adjacent canal system has removed substantial hydrology from this regional area which was historically within the Everglades wetlands area. Due to the urbanized nature of Broward County and District Four, this site with contiguous wetlands outside of our project area was found to be high priority for restoration and based upon preliminary mitigation planning performed by Mr. Shearer and the mitigation team the site has a high credit yield for its location and size, compared to the other sites evaluated and available for District use. Mitigation plans for the site will include equestrian trails, as this site is currently used recreationally by equestrian riders and other trail users. Mr. Shearer has supported extensive FDOT coordination with Broward County Parks and Recreation in order to meet with the equestrian users, hold equestrian input meetings, and to win over the community to support the need for the project and benefits to the community through resilience and wetland restoration benefits. In order to appease the equestrian community and permitting agencies Mr. Shearer created an innovative design for the project which incorporates stormwater treatment into the raised equestrian path to provide water quality filtration, limits wetland impacts to the trail corridor which is negated from the wetland credit yield, and to address the existing flooding issues which compromise the existing trails and causes trail closures due to flooding. Public comments were critical and incorporated into the design with the direction of FDOT and Broward County. Additional trail management and clearing was proposed in order to satisfy public comments related to the project and increase acceptance. RES has coordinated preparation of legal documents such as a Site Access Agreement and Memorandums of Agreement (MOA) between the county, FDOT, and RES' team. RES will submit the mitigation plans and permit applications necessary for site development, and coordinate meetings with partners and permitting agencies, and requests for additional information. Construction funds are allocated for FDOT for fiscal year 2026-2027.



Megan Reising, MS

Senior Scientist

Ms. Reising is a Senior Scientist specializing in natural resource assessments, threatened and endangered species surveys, construction compliance, benthic resource surveys, and environmental permitting at the federal, state, and local levels. She provides numerous ecological services to clients, including the following: marine and estuarine habitat assessments; coastal habitat assessments and permitting; upland habitat assessments and permitting; GPS data collection and GIS mapping.

Ms. Reising is a scientific diver, with over 10 years of diving experience. Ms. Reising is trained in sampling and analytical techniques for field data collection, water quality sampling and assessment and species identification, including seagrass, coral, octocorals, fish and mangroves.

SELECT WORK EXPERIENCE

Hollywood Mooring Field Support, City of Hollywood, Broward County, Florida

RES is providing environmental and engineering support for the City of Hollywood to develop a mooring field. The scope of this project includes agency meetings, evaluating management options, and upland support facilities. Ms. Reising assists with desktop reviews, city/agency coordination, permitting applications, and natural resource surveys.

Parco Mare Mangrove Mitigation Monitoring, Broward County, Florida

Establish time-zero and five-year mitigation monitoring plan to offset mangrove impacts as a result of project development. Conduct quarterly mangrove measurements and monitoring. Prepare and submit quarterly monitoring reports to the County and annual monitoring reports to USACE. Ms. Reising established the initial five-year monitoring plan and assisted with mangrove monitoring and report submittal to regulatory agencies for compliance.

Mills Pond Park Mitigation Monitoring, City of Fort Lauderdale, Broward County, Florida

Establish time-zero and five-year mitigation monitoring plan to offset wetland impacts as a result of project development. Conduct quarterly wetland and invasive/exotic vegetation monitoring. Prepare and submit quarterly monitoring reports to the City. Ms. Reising coordinates with the City for monitoring field efforts and reviews the monitoring reports.

Urban Forestry Master Plan, City of Fort Lauderdale, Broward County, Florida

The City of Fort Lauderdale's Urban Forestry Master Plan (UFMP). RES was awarded the contract to write the City's UFMP, a Master Plan that will identify pathways to resolving urban forestry issues and achieve urban forestry goals, such as creating incentives for tree preservation and increasing canopy cover. Additionally, the UFMP will tie into existing City Master Plan documents, creating a cohesive strategy to make Fort Lauderdale a modern and resilient urban center. Ms. Reising is the assistant project manager and coordinates data collection, public outreach, and the final plan submittal.

Districtwide Mitigation, Wildlife and Environmental Services Contract, FDOT District Four, Florida

RES assessed impacts to federally- and state-listed species associated with the Natural Resource Re-evaluation Technical Memorandum. Work included reviewing previous listed species reports, data collection and analysis, and providing a Natural Resource Evaluation (NRE) report summarizing the findings. Ms. Reising reviewed previous listed species reports, collected data and prepared the NRE.

Black Creek Trail Living Shoreline Design and Permitting, City of Homestead, Miami-Dade County, Florida

RES provides environmental and engineering support for the Black Creek Trail living shoreline project. The scope of this project includes engineering design and environmental permitting. Ms. Reising assists with desktop reviews, city/agency coordination, marine benthic surveys, environmental assessments, and permitting applications.

AT A GLANCE.

Email

mreising@res.us | 954.824.0315

Years of Experience

12 years

Education

- MS, Biology, Florida Atlantic University, 2013
- BS, Zoology, The Ohio State University, 2011

Certificates | Licenses

- American Academy of Underwater Sciences (AAUS) Scientific Diver
- PADI Advanced Open Water Scuba Diver, Nitrox
- DAN Oxygen Provider Certification
- CPR/AED/First Aid Provider



One Island Park Permitting Support and Coral Relocation, Miami-Dade County, Florida

The project involves the redevelopment of One Island Park in Miami Beach, Miami-Dade County, Florida. RES was engaged to conduct a marine resource assessment and provide permitting support for the proposed project, including conducting coral relocation required by the state. Ms. Reising has assisted with the marine resource assessment, report, and coordination of coral relocation.

St. Lucie Artificial Reef Feasibility Study and Design, St. Lucie County, Florida

RES conducted a feasibility study for an artificial reef in Saint Lucie County. RES identified and reviewed suitable artificial reef locations, prepared a feasibility study report, and presented the feasibility study results to the county commission. Based on the study, the County moved forward with a proposed location and requested RES design and permit the artificial reef. Services are ongoing for artificial reef design and regulatory permitting. Ms. Reising provided regulatory permitting consultation and grant review.

Environmental Surveys Palm Beach Gardens Mosque, Palm Beach County, Florida

Ms. Reising completed a natural resource due diligence effort including desktop and field review to determine the potential presence of wetlands and protected floral and faunal species. She also completed the associated report discussing potential natural resource permitting and a general discussion of potential mitigation for natural resource impacts.

Brownfields Cooperative Agreement Grant, University of South Florida, Manatee County, Florida

RES provides technical support and document review of remediation documents, regulatory correspondence, documents related to planning, independent studies, academic institutional research, and other project related documents. Ms. Reising reviewed and provided technical feedback on Wetland Monitoring Reports, agency correspondence, permit activities, and compliance.

Seven Miami Beach Seawall Rehabilitation Projects, City of Miami Beach, Miami-Dade County, Florida

RES performed marine benthic and tree inventory surveys at seven seawall locations Miami Beach and acquired environmental permits from SFWMD, RER and USACE. Ms. Reising assisted with preparing the Natural Resources Assessment Report and the permit applications.

Environmental Engineering Continuing Services, City of Miami Beach, Miami-Dade County, Florida

RES maintains an ongoing contract to conduct miscellaneous environmental services. Tasks conducted include preparation of SPCC plans for 12 facilities including pump stations, fire stations, public works yard, Miami Beach Golf Club and the Convention Center and contamination assessment of the green waste facility. Ms. Reising provided support services as needed.

Highland County Multiple Sites Natural Resources Review, Highland County, Florida

Ms. Reising completed a natural resource due diligence effort including desktop and field review to determine the potential presence of wetlands and protected floral and faunal species at three different sites totaling over 1200 acres. She also completed the associated report discussing potential natural resource permitting and a general discussion of potential mitigation for natural resource impacts.

Ryan Homes Tree Inventory, Pasco County, Florida

RES performed a tree inventory assessment of 830 trees for a development site and prepared an arborist report detailing tree inventory and mitigation requirements. Ms. Reising coordinated field assessments and assisted with the final report deliverable.

Citywide Tree Inventory, City of Clermont, Lake County, Florida

RES conducted an inventory of over 3,000 trees in city-owned streetside rights-of-way, collecting data including species, condition, defects, and infrastructure conflicts. Ms. Reising coordinated field assessments and assisted with the final report delivered to the City.

Land Search in Basin 4 for Permittee Responsible Mitigation, City of Jacksonville, Duval County, Florida

RES provides desktop reviews and Uniform Mitigation Assessment Method (UMAM) scoring for various properties for permittee-responsible mitigation (PRM) to determine the ecological standpoint on site, such as suitability, potential ecological lift, and potential credit generation from the mitigation bank. Ms. Reising assisted with desktop summaries and potential credit allocation by scoring properties through the UMAM.



AirQuest Key Staff:



Traci-Anne Boyle, MBA, CIH, CSP

President/CEO/Owner



PROFESSIONAL DISCIPLINES:

- Indoor Air Quality
- Asbestos
- Defective Corrosive Drywall
- Corporate Social Responsibility/Sustainability
- Industrial Hygiene
- Contamination Assessments and Remedial Action
- Litigation Support/Expert Witness
- Maritime Industrial Hygiene / EH&S
- Mold Assessment and Remediation

EXPERIENCE: 32 years

EDUCATION:

Master of Business Administration, June 2002
University of Baltimore, Baltimore, Maryland
Bachelor of Science Biology, August 1993
Florida International University, Miami, Florida

EMPLOYMENT:

AirQuest Environmental, Inc. August 2002-Present
CRB Geological & Environmental Services, Inc., October 1993 to August 2002

BIO:

Ms. Boyle has over thirty-two (32) years of diverse environmental consulting and industrial hygiene experience spanning more than thirty states in the US as well as the Caribbean. Her niche is in successfully directing sensitive, complex, multi-disciplinary, and large-scale environmental and industrial hygiene projects. Her experience includes simultaneous senior project management of multi-million dollar environmental projects in three (3) states.

Ms. Boyle has provided environmental consulting to a variety of parties including domestic and foreign government officials, attorneys, insurance companies, lending institutions, architects, engineers, the construction industry, property asset managers, multi-national corporations, and regulatory agencies.

REGISTRATIONS, LICENSES & CERTIFICATIONS

American Board of Industrial Hygiene, Certified Industrial Hygienist (#8561, Comprehensive Practice, July 2003)
Board of Certified Safety Professionals, Certified Safety Professional (#23595, November 2012)
Florida Asbestos Consultant (#AX-60, June 2005)
Florida Mold Assessor (#MRSA-135, November 2010)
OSHA Health and Safety Certified for Hazardous Waste Operations, 29 CFR 1910.120, 1994
Asbestos Building Inspector: Accreditation under TSCA Title II/AHERA, 1995
Asbestos Project Designer: Accreditation under TSCA Title II/AHERA, 2004
Asbestos Management Planner: Accreditation under TSCA Title II/AHERA, 2004
OSHA Certified Competent Person Class II Asbestos Abatement Supervisor, 29 C.F.R. part 1926.1101, 1998 only
Mold Assessment & Remediation in Buildings, 2002
Respiratory Protection, 2003

(The above course descriptions are for the original courses. If required, the requisite annual courses have been taken to maintain certifications unless noted.)

ASSOCIATIONS

American Board of Industrial Hygiene, Subcommittee on Stewardship and Sustainability
American Conference of Governmental Industrial Hygienists
American Industrial Hygiene Association
American Society of Testing Materials (ASTM) International, Subcommittee on Environmental Assessment (2003-2016)
Board of Certified Safety Professionals
National Association of Environmental Professionals, Member #11050 (1996-2009)
Indoor Air Quality Association
Women's Business Enterprise National Council
Women Impacting Public Policy, Subcommittee on Energy & the Environment (2009-2010)
Beta Gamma Sigma, Member #837318

SELECTED PROJECT EXPERIENCE

Asbestos Emergency Response, Surveys & Abatement Oversight

Provided senior project management to an emergency response to an asbestos release aboard a passenger cruise ship that



was in dry-dock undergoing interior renovations. The logistics for the project included operating in a foreign country (Curacao, Netherland Antilles), coordinating and/or overseeing 100 asbestos abatement workers and asbestos consultants, foreign government officials, the vessel owner, the captain and crew of the vessel, the dry-dock owner's representatives and consultants from the Netherlands and working under intense time constraints. The asbestos abatement project was successfully completed within eleven (11) working days. Air monitoring and onboard asbestos consulting continued for an additional six (6) weeks while renovations to the ship were completed.

Senior project manager for an asbestos survey of over 2 million square feet of space within four (4) buildings of the Broward County Judicial Complex in downtown Fort Lauderdale, Florida. The laboratory results were incorporated into a 10,000-entry interactive database for the County's use.

Certified Industrial Hygienist that provided on-site supervision and senior project management to determine the presence of asbestos containing materials (NESHAPs and the CAA compliance) at the Virgin Islands Army National Guard facility in St. Croix, US Virgin Islands. Contract specifications were developed for the abatement.

Veteran's Administration Certified Industrial Hygienist. Conducted asbestos and lead based paint surveys of the 7,000 square foot renovation area. Designed specifications for the asbestos abatement. Managed the asbestos abatement oversight on behalf of the VA.

Mold Assessment & Remediation

Conducted a mold and moisture survey of an occupied building in Miami, Florida. The occupants had been complaining of symptoms consistent with indoor mold amplification for several years. Numerous previous studies had been conducted on behalf of the building owner that suggested indoor microbial growth. Recommendations had been made, however the symptoms continued and several occupants permanently vacated the building. The purpose of the survey was to document the living conditions on behalf of the residents in support of potential medical claims. The moisture survey demonstrated that over half of the building materials had excess moisture. The relative humidity was above ASHRAE recommended levels. Over thirty (30) air and bulk samples were collected for total spore counts, viable culturable fungi, and fungi identification. The results clearly demonstrated indoor amplification of *Penicillium* and *Aspergillus*. Photographs were taken illustrating mold growing on the interior of the air ducts and on the underside of vinyl floor tile. A report was prepared summarizing all of the previous investigations conducted on behalf of the building owner and the investigation conducted on behalf of the residents.

Conducted a mold survey for a residential unit in Homestead, Florida. The unit had been impacted by two (2) water incursion events several months apart. The survey was requested to determine if the mold impacts could be differentiated based upon the sources so that the remedial costs could be apportioned appropriately by the responsible parties. Photographic documentation was collected, observations were recorded, and bulk, tape lift and air samples were collected. The results of the investigation indicated that the source of the mold contamination could be differentiated based upon the observed damaged areas and the types of mold in these areas.

Indoor Air Quality

Conducted a Baseline Indoor Air Quality Survey and Prepared an Operations and Maintenance Plan for a municipal Fire Station. Particular attention was focused on documenting the quality of the heating, ventilation, and air conditioning (HVAC) system through readings of relative humidity, temperature, carbon dioxide and carbon monoxide. Volatile organic compounds and respirable particles were evaluated using a MiniRAE Photolonization Detector and a MIE PDM-3 Miniram, respectively. Data was collected using real-time digital readouts and datalogged over a 48 hour period for download and analysis. At the Client's request, representative areas were selected for bioaerosol monitoring. Samples for both viable culturable fungi and total spore counts were collected. The procedures and results of the investigation were incorporated into a comprehensive baseline survey report, outlining the findings of the sampling and recommendations for corrective action. Baseline background facility information was collected and incorporated into the O&M Plan including a chemical inventory list. Checklists were developed to assist internal personnel and/or outside consultants in monitoring potential indoor air quality concerns. The report identified specific tasks and schedules. Semi-annual monitoring is performed at this facility.



James S. Litrides, MS, CIH, FLAC, MRSA

Director, Industrial Hygiene Services



PROFESSIONAL DISCIPLINES:

- Industrial Hygiene
- Indoor Air Quality
- Asbestos, Mold, Lead Based Paint
- OSHA & EPA Compliance
- LEED Testing
- Noise, Radon, Heat, Illumination
- Expert Witness

EXPERIENCE: 43 years

EDUCATION:

Master of Science, Environmental Science, 1980
Drexel University, Philadelphia, Pennsylvania
Bachelor of Arts, Biology, 1976
Lehigh University, Bethlehem, Pennsylvania

BIO:

Mr. Litrides joined AirQuest after a distinguished history in comprehensive industrial hygiene and environmental consulting. Prior to joining AirQuest, he was principal of his own full service environmental and industrial hygiene consulting company, as well as an 8-year tenure as the Manager of Safety and Occupational Health for Broward County, Florida. He has over forty-three (43) years of industrial hygiene and environmental consulting experience providing services to a wide array of clients, representing government, institutional, private and public sectors. Mr. Litrides has worked closely with insurance companies to resolve claim liability and provided expert testimony in litigation proceedings. He has also managed industrial hygiene programs for large companies and municipalities. Focusing on occupational health and safety (OHS), Mr. Litrides has developed compliance programs and procedures, provided training, and audited policies to maintain safe and healthful workplaces.

REGISTRATIONS, LICENSES & CERTIFICATIONS

- ABIH Certified Industrial Hygienist (CIH), No. 3611CP
- ABIH Indoor Environmental Quality (IEQ) Sub-Specialty
- State of Florida Asbestos Consultant, No. IA0000009
- State of Florida Radon Measurement Specialist, No. R1145
- State of Florida Mold Assessor, No. MRSA 35
- Asbestos Building Inspector: Accreditation under TSCA Title II/AHERA
- Asbestos Project Designer: Accreditation under TSCA Title II/AHERA
- Asbestos Management Planner: Accreditation under TSCA Title II/AHERA
- Asbestos Contractor/Supervisor: Accreditation under TSCA Title II/AHERA
- OSHA Hazwoper 40-Hour Certification
- OSHA 10-Hour Construction Industry Outreach Training
- FEMA Environmental Health Training in Emergency Response (EHTER) – Operations, 2016
- FEMA Surveillance Awareness: What You Can Do, IS-00914, 2015
- FEMA ICS for Single Resources and Initial Action Incident, ICS-200, IS00200.b, 2012
- FEMA Introduction to Incident Command System, ICS-100, IS-00100.b, 2012
- FEMA Basic Workplace Security Awareness, IS-00906, 2015
- FEMA Active Shooter: What You Can Do, IS-00907, 2015
- FEMA National Incident Management System (NIMS) An Introduction, IS-00700.a, 2009

ASSOCIATIONS

- American Industrial Hygiene Association (AIHA)
- American Board of Industrial Hygiene (ABIH)
- American Conference of Governmental Industrial Hygienists (ACGIH)
- American Society of Heating, Refrigerating, & Air Conditioning Engineers (ASHRAE)
- Indoor Air Quality Association (IAQA)
- National Registry of Environmental Professionals (NREP)
- Controlled Environment Testing Association (CETA)



SELECTED PROJECT EXPERIENCE

City of Tamarac - Performed an indoor air quality assessment at the City Hall Building. The purpose of the on-site investigation was to establish background data of potential ambient air contaminants and/or physical characteristics which contributed to the quality of indoor air. Chemical parameters included carbon dioxide and formaldehyde. Physical parameters included temperature, humidity, and ventilation. Biological testing included bacteria and fungi. The final report included the description of the nature and sources of indoor air quality problems and the conditions that caused them.

General Services Administration - Provided consulting services to the General Services Administration for comprehensive industrial hygiene, indoor air quality assessment, and mold, asbestos and lead consulting. The purpose of the initial assessment was to uncover the cause of musty odor, temperature and humidity problems in a federal courthouse building. The assessment included the sample parameters for organic vapors, fungi, bacteria, carbon dioxide, ventilation, and temperature/relative humidity. Findings were provided to GSA along with specific remedial actions necessary to correct any problems identified.

Broward College -

Performed an indoor air quality assessment in a classroom building which was experiencing temperature and humidity problems. The IAQ assessment included the sample parameters for formaldehyde, 4-PC, organic vapors, asbestos, fungi, bacteria, carbon dioxide, ventilation, illumination, and temperature/relative humidity. The report detailed the findings with specific remedial actions necessary to correct the problems identified. This approach provided BC with an objectionable set of options to assess potential liability and safety issues at the college.

Performed a water damage and mold assessment in a classroom building, identified the problems, recommended replacement of the air handlers, and designed the remediation project specifications. The remediation included mold and mildew decontamination of the entire building and its contents and cleaning and decontamination of the buildings duct work. Mr. Litrides performed the project administration during remediation and performed the clearance testing after completion of the duct cleaning work.

Northwest Christian Academy - Conducted radon screening testing at Northwest Christian Academy for compliance with State of Florida HRS regulations. The first screening measurements were taken with charcoal canisters over a 2-day period with several results reported above the EPA action level of 4 pCi/L. Subsequent sampling was performed with long term alpha track detectors.

Palm Beach County - Performed consulting services for comprehensive industrial hygiene, asbestos and lead consulting in various schools throughout Palm Beach County. Utilized for the asbestos abatement project monitoring for various schools. Project monitoring was provided for over one hundred and fifteen schools throughout Palm Beach County.

State Farm Insurance Company - Contracted by numerous claim representatives throughout the State of Florida to provide consulting services for water loss incidents and mold related claims. Provided services for initial mold investigations which include environmental sampling for airborne viable and total fungal samples, moisture testing on building surfaces, contact sampling for determining fungal contamination, and spore sampling inside wall cavities to determine the need for remediation. Based on the findings, Mold Remediation Guidelines were developed for contractors to follow proper procedures in mold abatement projects. Upon completion of remediation, airborne clearance testing using laser particulate counting methodology was performed before allowing the Contractor to dismantle the containment system. Follow-up bioaerosol sampling for both viable and total fungi was performed after restoration to determine if the indoor air has returned to a "normal" fungal ecology.

Palm Beach College - Conducted a survey of 70 buildings consisting of 1.2 million square feet of space at Palm Beach College. The inspections were completed, and comprehensive Management Plans were developed in accordance with the EPA AHERA regulations. Ongoing management of the program was provided along with project planning, specification design, compliance monitoring, and consultation.



Cynthia
LAROSA

Quality Assurance Manager

PERSONNEL RESUME

QUALIFICATIONS SUMMARY

Ms. LaRosa began working in analytical laboratories in 1990. She has extensive experience both on the bench and in management. She has widespread experience developing new analytical procedures, preparing SOPs, documenting demonstration of capability and training lab staff. Ms. LaRosa has broad experience in the analyses of trace metals, all of the routine wet chemistry tests as well as microbiology analyses. This experience includes compliance to EPA methodologies and NELAC / TNI standards.

PROFESSIONAL EXPERIENCE

QA MANAGER | *Eurofins Environment Testing, Orlando – 2005 to 2018, 2022 to present*
Responsible for planning, implementation, and results of the quality management system. Leads internal audits and interviews staff to identify procedural and process non-conformances. Performs investigations to determine root causes and corrective actions for identified deficiencies. Performs quality control data review for trend analysis and improvement opportunities. Measures test equipment, performs calibrations and verifications on support equipment. Corrects and revises procedures to improve quality and maintain compliance with the environmental laboratory quality standards.

LABORATORY MANAGER | *2018 to 2022*

CHEMISTRY SUPERVISOR/ CHEMIST/MICROBIOLOGIST | *2001 to 2005*

CHEMISTRY SUPERVISOR/CHEMIST | *Tri-Tech Analytical, 1999 to 2001*

OWNER/OPERATOR | *Top Banana, 1995 to 1999*

CHEMISTRY SUPERVISOR/CHEMIST | *GEOS Laboratory, 1992 to 1995*

CHEMIST | *Thornton Laboratories, 1990 to 1992*

CHEMIST | *Vermont Dept of Agriculture, 1986 to 1990*

EDUCATION

- BS Biology, Norwich University, Northfield, VT (1986)

PROFESSIONAL AFFILIATIONS

- Florida Society of Environmental Analysts

**PERSONNEL RESUME**

Jess
HORNSBY
Client Services Manager

QUALIFICATIONS SUMMARY

Mr. Hornsby has been in the environmental laboratory industry since 2004, which includes management/leadership experience, as well as sample control and field experience. He has a B.S. in Political Science from Georgia Southern University. He is an innovative, results oriented professional who works effectively with both clients and coworkers to plan, organize and direct teams to accomplish company goals. He previously held positions as a sample control supervisor and service center manager.

PROFESSIONAL EXPERIENCE**CLIENT SERVICES MANAGER | Eurofins, Orlando – Jan 2023 to Present**

As Client Services Manager Mr. Hornsby is responsible for interviewing and hiring; training; and managing a client service team of project managers and assistants based at multiple Eurofins facilities in Florida. This group is charged with coordinating all aspects of project management for assigned clients including project setup; communication with laboratory staff; preparation of analytical reports; invoicing; client follow-up and customer service. Mr. Hornsby makes the client and project assignments; monitors PM productivity and performance; and provides guidance and training to the team. He is the liaison with laboratory leadership to make process improvements and to facilitate communication. He provides weekly and monthly reports to management and participates in business development activities. In addition to these duties, Mr. Hornsby continues to serve as project manager projects for key clients in the Florida market.

PROJECT MANAGER | Eurofins, Tampa – 2012 to Present

Mr. Hornsby serves as the primary contact for selected clients. As a project manager, he identifies analytical goals and data quality objectives while providing the client with pre-project planning assistance. He assists clients with project-specific quality assurance plans, coordinates the dispatch of sample containers, reviews project and site-specific information on arrival of samples in the laboratory, tracks project status, reviews final analytical reports for completeness, accuracy, and to ensure client data quality objectives have been met.

SERVICE CENTER MANAGER | Eurofins TestAmerica Orlando – 2011 to 2012

Mr. Hornsby's responsibilities included managing the day-to-day operational activities of the laboratory and field operations, supervising the sampling and courier team as well as overseeing the analytical operations. Mr. Hornsby led his staff to maintain quality control and EH&S systems, resolve scheduling conflicts and delivery issues, provided regulatory and sampling expertise to laboratory clients and evaluated programs and capacity within the laboratory. He worked with sales and marketing team to drive revenue, and managed service center costs to meet budget objectives.

PROJECT MANAGEMENT ASSISTANT | 2006 to 2011

Mr. Hornsby provided direct support for the project management team as well as working directly with clients. In this capacity he initiated new projects, set up deliverable requirements, assisted in EDD implementation and assisted in any other area required to insure excellent customer service.



DEPARTMENT SUPERVISOR SAMPLE CONTROL BOTTLE PREP | 2004 to 2006

Responsibilities included managing day to day operations of the sample control and bottle prep sections; implementation of quality control and EH&S procedures; inventory control; training of technicians in receipt and logging of samples and preparation of sample bottle kits; procedure development and process improvement to maximize efficiency; track shipments to ensure client satisfaction; oversee distribution of supplies and materials to laboratory sections.

EDUCATION

- B.S. Political Science, Georgia Southern University, Statesboro, GA 1993

PROFESSIONAL TRAINING

- Ethics Training
- Customer Service Training
- Leadership Development Training
- DOT Hazardous Shipment Training

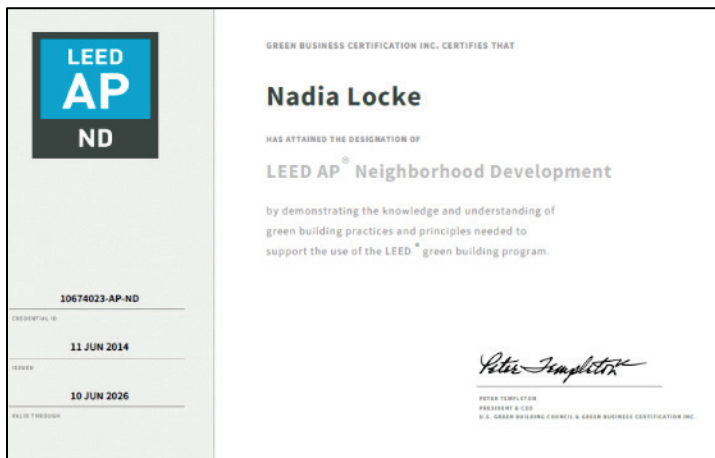
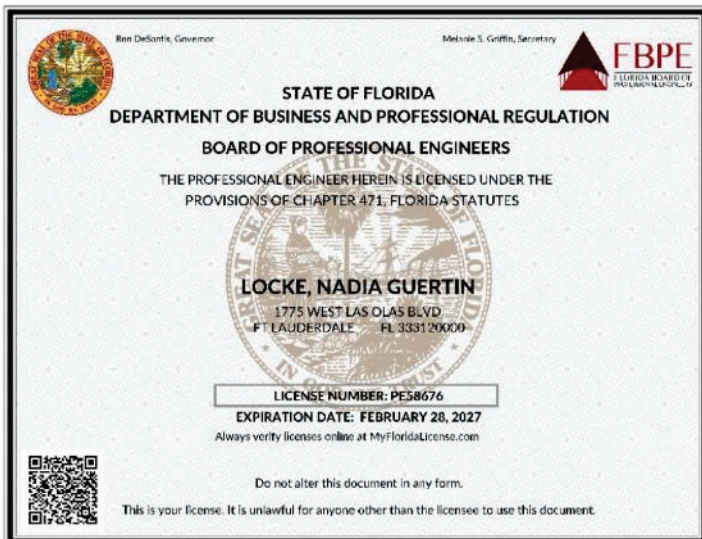


Key Staff Licenses

Rachel Vitek




Nadia Locke





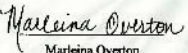
**QUALIFIED
STORMWATER MANAGEMENT
INSPECTOR**



The undersigned hereby acknowledge that


Nadia G. Locke

has successfully met all requirements necessary to be fully certified through the Florida Department of Environmental Protection Stormwater, Erosion, and Sedimentation Control Inspector Training Program


 September 5, 2002
 

Marleina Overton
 Inspector # 3263
 Greg Knecht


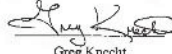
**QUALIFIED
STORMWATER MANAGEMENT
INSTRUCTOR**



The undersigned hereby acknowledge that

Nadia Locke, P.E.

has successfully met all requirements necessary to be an Instructor for the Florida Stormwater, Erosion, and Sedimentation Control Inspector Training Program


 September 9, 2002
 

Marleina Overton
 Instructor # 130
 Greg Knecht



Certificate of Attendance

Let it be known that

Nadia Locke


has successfully completed the course and after passing the required examination, is hereby awarded this certificate

ON February 14, 2025
 FOR 8hr HazWOper 1AW 29CFR1910.120

Certificate Number: SHZ.WP021425
 Expires: February 14, 2026


 Arthur J. Sodermark
 Training Center Director

Kathryn Eisnor



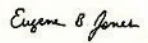
The International Society of Technical & Environmental Professionals, Inc. (INSTEP)

Hereby Certifies that:

Kathryn Colbert

*Has Passed the INSTEP
Licensed Environmental Professional (LEP) Exam
and is hereby issued the following LEP #:*

370




 Administrator

**QUALIFIED
STORMWATER MANAGEMENT
INSPECTOR**

The undersigned hereby acknowledges that

Kathryn E Colbert

has successfully met all requirements necessary to be fully certified through the Florida Department of Environmental Protection Stormwater Erosion and Sedimentation Control Inspector Training Program


 February 26, 2009
 

Hal Lunsford
 Inspector Number 21246
 Heather Ritchie



**QUALIFIED
STORMWATER MANAGEMENT
INSTRUCTOR**



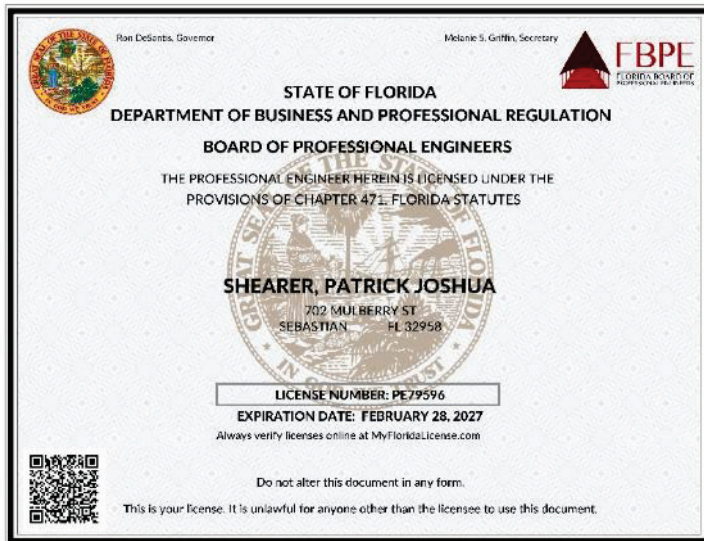
The undersigned hereby acknowledges that

Ms. Kathryn Colbert

has successfully met all requirements necessary to be an
Instructor for the Florida Stormwater, Erosion, and Sedimentation
Control Inspector Training Program

August 26, 2010 
Instructor 588
Halton Lunsford

Patrick Shearer



STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE
PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

SHEARER, PATRICK JOSHUA
702 MULBERRY ST
SEBASTIAN FL 32958

LICENSE NUMBER: PE79596
EXPIRATION DATE: FEBRUARY 28, 2027
Always verify licenses online at MyFloridaLicense.com

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This is your license. It is unlawful for anyone other than the licensee to use this document.

**QUALIFIED
STORMWATER MANAGEMENT
INSPECTOR**

The undersigned hereby acknowledges that

Patrick Shearer

has successfully met all requirements necessary to be fully qualified through
the Florida Department of Environmental Protection Stormwater Erosion
and Sedimentation Control Inspector Training Program

April 21, 2016 
Inspector Number 34890 
Hal Lunsford Beth Alvi

Megan Reising

MEGAN E. REISING



Diver No. 14020T8611
BirthDate 14-Jul-1989
Cert.Date 20-Feb-2014
Instr.No. MSDT-269822
DELANEY R. BROWN
19374
PARROTS DIVE CENTER

UTILA, HONDURAS
504 2 425 3772

This qualification meets ISO 24801-2: Diver Level 2 - Autonomous Diver Standard
This diver has satisfactorily met the standards
for this certification level as set forth by:
PADI, 30151 Tomas, RSM, CA 92688-2125
www.padi.com

MEGAN E. REISING



Diver No. 14030A2527
BirthDate 14-Jul-1989
Cert.Date 28-Feb-2014
Instr.No. IDCS-309516
LYDIA VAN VLYMEN
16953
UNDERWATER VISION
THE POINT
UTILA, BAY ISLANDS
504 2425-3103

This diver has satisfactorily met the standards
for this certification level as set forth by:
PADI, 30151 Tomas, RSM, CA 92688-2125
www.padi.com

Megan Reising

Has completed the course requirements for the
rating of:

Cert #: 901606
Date: 2018-07-06

Computer Nitrox Diver

Location: Miami, FL

Inst: Mark Hartman Member #:25707



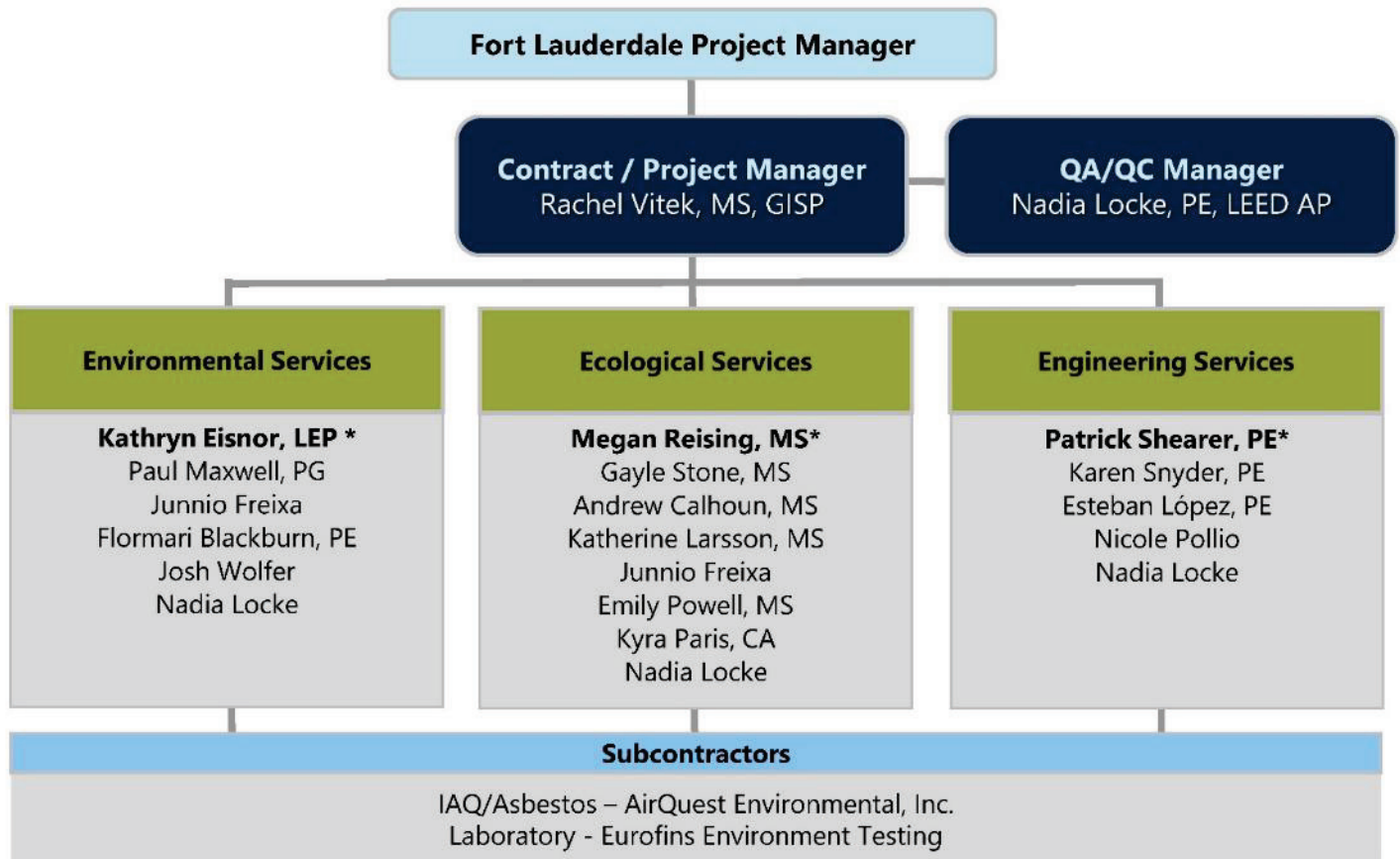
RSTC Member | EUF/ISO #9001 Certified | www.tdidi.com



Organizational Chart

The six key staff members discussed above are supported by over 75 technical staff in Florida. The Organizational Chart below depicts staff members who will be key to supporting the Project Managers for execution of tasks described in this RFQ.

Environmental Engineering Consulting Services, Continuing Services Contract RFQ Event No. 501



*** Discipline Lead**

RES has over 75 Technical Support Staff available to assist from all Florida offices



Tab 5 Approach to Scope of Work

The City of Fort Lauderdale has an excellent reputation for providing a balance of work, life, fun and prosperity for its residents, business interests, and tourists and this reputation extends beyond its boundaries. A great part of this success is the City’s ability to manage its natural resources within a progressive urban environment. With prominent and important natural features such as the New River and clean sandy beaches, successful redevelopment plans, pedestrian and bicycle friendly areas, expansion of greenspaces and the urban forest and a commitment to sustainability and resiliency, Fort Lauderdale is a showcase City.

A great example of this is the recent RES deliverable to the City of the draft Urban Forestry Master Plan, which aimed to provide a road map for increasing the City’s tree canopy coverage to 33% by 2040. Primary components of the Plan include recommending incentives to preserve existing shade trees on development sites and residential and commercial lots, identifying opportunities to plant new trees on City-owned property, outlining streamlined communications and urban forestry operations across City departments, locating external funding sources for urban forestry programs, and describing potential tree steward partnerships between the City and community organizations. RES analyzed the City’s existing urban forestry data, facilitated public outreach meetings in all City Commission Districts, distributed a public survey, and consulted with City staff to support these efforts. The project is set to conclude in November 2025 with a presentation of the final draft of the Plan to the Fort Lauderdale City Commission.

The City promotes environmental responsibility and RES understands the array of services necessary to support the City in its efforts. The City requires a firm with a broad knowledge and experience base to manage environmental projects that will help the City achieve its goals. The RES South Florida office is conveniently located in Fort Lauderdale and employs residents who live in the City and surrounding communities. We look forward to the opportunity to continue bringing a “big picture” understanding of the City’s issues and broader benefits. One of the most significant qualifications that we bring is our understanding of the City’s goals and needs. This knowledge has been gained through literally living, working and playing in the City. We have been working with Fort Lauderdale staff on numerous projects as an incumbent on this contract since 2007. This commitment to the community is reflected in our approach to the scope of services and our staff experience. We share the City’s 2035 vision!

Understanding of the City’s Needs, Goals and Objectives

The City is more than halfway toward 2035 and so many of the City’s goals have been substantially advanced. The City has made great strides to meet the needs and desires of its residents and business community, maintain its stature as a major tourist destination, demonstrate environmental stewardship and keep up with rapidly changing urban trends. The City has embraced the challenge of balancing the increased market demand for higher density housing with residents’ concerns regarding traffic congestion, public demand for open space, alternative modes of transportation and other quality of life issues. This proactive planning process has enabled the City to make Fort Lauderdale a sustainable and desirable place to live and work. As Fort Lauderdale is nearing build-out there is little vacant land remaining to accommodate new development. This is evidenced by the progress in many of the City’s regional areas including the following:

- Downtown and uptown (Cypress Creek) business districts for employment
- Beach redevelopment for tourism, arts and recreation
- Northwest, downtown and adjacent to downtown areas for infill housing and housing redevelopment, public transit.
- Over 160 miles of canals and waterways supporting community, recreation and the City’s robust marine industry
- CRAs that encourage private participation in undertaking the preservation, rehabilitation and redevelopment consistent with the outlined community redevelopment programs and strategies

VISION STATEMENT

- WE ARE CONNECTED.**
We move seamlessly and easily through a safe transportation system where the pedestrian is first.
- WE ARE READY.**
We are a resilient and safe coastal community.
- WE ARE COMMUNITY.**
We are a neighborhood of neighborhoods.
- WE ARE HERE.**
We are an urban center and a vacationland in the heart of South Florida.
- WE ARE PROSPEROUS.**
We are a subtropical City, an urban laboratory for education and business.
- WE ARE UNITED.**
We are a strong and vibrant kaleidoscope of multi-generational cultures, ethnicities, and community partners.

We are Fort Lauderdale, a community of choice.
We are the City you never want to leave.



Complete Streets, Mockingbird Trail, Uptown Urban Village, Sistrunk Boulevard Streetscape and Enhancement Project, Fast Forward Fort Lauderdale, 40-Year or Older Safety Program and other initiatives continue to advance and demonstrate the City's commitment to providing the necessary infrastructure and community support to continue to attract redevelopment to these areas.

The City has already achieved many of its goals, such as becoming certified as a Florida Green Local Government, implementing many Complete Streets projects, being recognized as a top 10 place to retire, vacation and live, to name a few. RES applauds these goals and commends the vision of the City's future planning.

We understand the responsibility of the environmental consultant to support the City and its consultants in providing a coordinated and citywide approach to addressing the environmental issues and risks that must be managed as the City works towards its goals. We will continue to keep in mind the overall goals of the City as we work through the details of our projects.

Opportunities for Enhanced Services

Our understanding of the City's needs is based upon our firm and employee residents' firsthand experience with the City. Some specific issues that the City may be confronting that will require assistance from the firm who is awarded this contract include the following:

- Conduct annual canopy assessments and identify street trees vulnerable to coastal flooding to leverage the information that we compiled as part of the City's Urban Forestry Master Plan
- Responsive turnaround assessment for unanticipated storage tanks, discharges or discoveries that may arise from redevelopment of old historical land uses that may be identified during construction of public projects, such as those that occurred during construction at the Beach
- Water Quality Improvement projects, such as Tarpon River and Himmarshee Canal, associated with the 2019 sewage spills
- Contamination assessment or remediation at contaminated properties slated for redevelopment, such as the former City Hall property
- Technical support to assist the City with identifying potential impacts and costs from the numeric nutrient criteria and the National Pollutant Discharge Elimination System permits
- NEPA support to address FDOT's requirements for LAP or the MPO's Transportation Alternatives Program projects.
- Assistance with grants/funding such as, the Resilient Florida Grants, state appropriations, Brownfields Assessment and Cleanup grants and others
- Coastal permitting and consulting as the City needs to armor the shorelines to prepare for climate change are addressed, such as we did for the Palm Islands Drive seawall elevation upgrades. This can be in the form of seawall restoration and beach renourishment, among other projects
- Benthic surveys and permitting for support of dredging projects, such as the ones we conducted for the finger canals in Lauderdale Isles and the Himmarshee Canal.
- Ecological evaluations such as benthic surveys for docks, bridge refurbishment, or other water-related projects as we have conducted in the New River
- Phase I and Phase II ESAs on properties to facilitate redevelopment, such as the many we have conducted for the Northwest-Progresso-Flagler Heights CRA
- Industrial hygiene related services in response to employee concerns regarding indoor air quality and mold
- Building materials evaluations at buildings slated for renovation (such as fire stations) or demolition
- Inspection services such as those required for installation of subsurface improvements in an urban setting (light poles, bus shelters, sidewalk improvements, drainage structures etc.)
- SPCC Plans for areas with aboveground storage of petroleum such as the police station
- Assessment and dewatering plans in potentially contaminated areas
- Manatee observation for waterway projects, such as maintenance dredging



- GHG Surveys and carbon sequestration evaluations, such as we have conducted for other South Florida communities.
- Sedimentation and erosion control training for staff who conduct construction site inspections
- Environmental permitting for dredging, such as we did for Tarpon River or for listed species relocations as we have done for FXE
- Assisting with the Brownfields site designation review and processes
- Design and construction oversight for created wetland systems such as River Oaks.

Proposed Vision, Ideas and Methodology

There are numerous ways that RES can assist the City with a cohesive and enhanced environmental program.

RES has an integrated and multi-disciplinary approach to enhanced sustainability. We believe that the City can experience exponential benefits to the environmental program by exploring some of the following concepts:



- Identify ways to improve water quality – We know that this is a hot topic for the City and its residents. RES' has a national water quality solutions team that is based out of Florida. Our team can partner with the City to conduct source evaluation and apply progressive science and experience to develop projects for water quality improvement. Our national water quantity solutions team would be brought in to identify integrated solutions for both water quality and flood resilience projects. Our team is very adept in obtaining grants and state appropriations for projects within Florida and we can bring this benefit to the City.
- Reaching for synergy beyond the City limits – One of the areas that RES excels in is building partnerships. We have developed excellent relationships with numerous state, county and local South Florida public, private and non-profit entities. Our senior staff have been actively engaged on the Fort Lauderdale Riverwalk, MPO's Community Advisory Committee, the SGP Board and the Florida Brownfields Association. We can assist the City with these progressive-minded partners who can help the City with climate change mitigation, infrastructure projects and collaboration with other partners.
- Tap into Available Resources – RES is a consultant on an EPA Brownfields Assessment Grant. We met with the Northwest Progresso CRA to identify projects that could be funded by EPA to help in some of the redevelopment projects. We have done this in the past on previous grants, and this can be another tool for the City and the CRAs to use. If this grant is used to identify contamination and conduct cleanup planning, it can be leveraged to seek cleanup grant funds for those projects. We were successful in doing just this for a community garden in West Palm Beach.
- Coordination with Other Sustainability Initiatives – The City is doing an amazing job of participating with other entities to support worthy initiatives such as the County's Bike Sharing Program. We believe that our contracts with the County, FDOT, SFWMD, FDEP and other municipalities can be vehicles for us to assist the City continue to capitalize on additionally regionally beneficial projects.

Project Approach

RES' approach to completing the services under this contract will include providing strong leadership, experienced program management, solid team organization and excellent communication. We will partner with the City and work as an extension of your staff. Our team has committed the resources of a highly qualified team of registered environmental scientists, geologists, engineers, and ecologists to service each of the scope tasks. We understand the project scope and are ready to assist the City in successful management of its environmental program.

Management Approach

The following paragraphs highlight our approach, concepts, and quality control procedures that have proven to be successful on this contract and will continue to be the basis for our management approach.

Contract Management: RES' management philosophy is based on listening to City staff and understanding the City's business and technical needs, budgetary constraints, staffing needs, and project deadlines. We will develop our project-



specific scopes to satisfy these needs, combining experience with ingenuity to find the best solution for each situation. We consider efficiency of design, quality of work, and on-time performance essential components of our company. Our aim is to provide accurate information and sound solutions that satisfy the needs of the City, regulatory agencies and the public. RES can mobilize teams to simultaneously complete multiple projects. We have successfully managed projects ranging from simple studies to large multi-disciplinary projects. The goal of our project management system is to provide quality service that is responsive to the client's needs, is on time, and is within budget. Our organizational structure enables the contract manager, Rachel Vitek, to provide overall contract management and to oversee project execution in a centralized manner. If appropriate for smaller tasks and projects that require specific expertise, Ms. Vitek may assign a project coordinator to handle the day-to-day execution of the project or task. This process will ensure that an integrated approach is used in executing individual task orders. Upon receiving a task order from the City, Ms. Vitek will review the task order; provide the fee estimate; and schedule the workflow. She will then assemble and mobilize the appropriate professional and technical team members for executing the work. She will monitor the status of schedule, budget, technical quality and overall performance. Ms. Vitek excels at proactively working to avoid or mitigate project problems before they adversely affect the performance of the assigned services.

QA/QC: RES applies a Total Quality Management approach to its Quality Assurance Plan (QAP). We incorporate quality assurance into each facet of our services, from the first phone call to the final invoice. The ultimate purpose of our QAP is to provide the City with the confidence that services are performed according to the appropriate industry standards and that quality assurance is integral to every step of our process. RES has achieved successful results on this contract as a result of our detailed, structured approach to controlling workflow. Our methodology describes the tools and approach we typically utilize to ensure that our services are completed on schedule and within budget.

While the concepts discussed above are procedural and mechanical, total quality and success can only be achieved by jointly committing to goals established by the City, regulatory or other agencies involved, and the RES team. RES is committed to the goal of partnering, and drawing on the strengths, skills, and knowledge of each team member to achieve a quality project that is completed right the first time, within budget and on schedule.



Scheduling Methods: We understand the importance of production schedules and delivery dates. In order to meet project deliverable dates that may have accelerated schedules we have automated our project scheduling process from the inception of the project. We utilize Microsoft Planner to develop internal structure and deadlines to coordinate with all staff. When the project scope has been approved by the City, Ms. Vitek will initiate preparation of the necessary work plan, sampling plan, and health and safety plan as appropriate and set the project up in Microsoft Planner. The second

tier of the project management process is for the project coordinator to assemble and mobilize the most appropriate professional and technical team members for execution of the work. The project coordinator will administer the day-to-day activities for the duration of the project. He or she will monitor and report the status of schedule, budget, technical quality, and overall performance for timely review by Ms. Vitek and the Quality Assurance Professional, Ms. Locke. With an adaptive management philosophy, should unexpected issues that impact schedules arise, Ms. Vitek will notify the City promptly and offer alternatives to mitigate schedule impacts.

Ms. Vitek will continue to regularly communicate with City staff with project updates. The update may be communicated in a written report, if requested, or may simply involve affirmation of the project schedule and tasks performed over the past week via electronic mail, if preferred. Periodically, RES will provide a project status report. This will likely be provided with an invoice (if project is to be invoiced monthly) and other reports or documentation required by the task order or desired by the City's project manager.

Current and Projected Workload

We have reserved resources in our workload capacity for the City as we face the eventual expiration of our contract. As such, we have plenty of resources available to continue to respond to the City's needs quickly and efficiently. Over the past year, RES has worked on projects for the City of Fort Lauderdale including general NPDES implementation assistance, the Urban Forestry Master Plan, multiple Phase I ESA's, the City Hall SAR, and One Las Olas.



Technological Capabilities and Resources

We are aware of the importance of the City's GIS Program. We understand that GIS is integral to the City's day-to-day management. RES uses GIS regularly in the course of our business. Our GIS specialists are currently mapping and georeferencing the stormwater and drainage infrastructures for FDOT District Four. These staff are also degreed in geography, wildlife ecology and urban planning, which provides context to the maps produced.

We maintain the latest version of ArcGIS and can work with various GIS data to meet the City's needs. RES' additional technological resources include Trimble handheld GPS for sub-meter accuracy measurements, range finders to improve efficiency of data gathering, a DJI Mavic 2 Pro drone as well as an underwater Remotely Operated Vehicle, and appropriate software for data management. We are prepared to provide and deliver collected data in a digital format that can be uploaded into your system and can tailor the data format to the needs of the project. We regularly provide deliverable documents in electronic format, with hard copies as needed or requested. RES' File Transfer Protocol site is available to our clients for transmittal of large electronic files both to and from RES.

RES maintains typical contamination assessment equipment such as water quality meters, turbidity meters, Van Doren samplers, hand augers, and pumps. We also own innovative field screening instruments, such as our Color-Tec equipment. This is a field based analytical method that combines gas detector tubes with a hand pump to detect low levels of contaminants in soil or groundwater. This is a useful tool when evaluating properties for volatile contaminants that may not be detected at low levels by flame ionization detectors or photo ionization detectors. We have used Color-Tec successfully at two chlorinated solvent sites in conjunction with direct push technology to bring real time results in the field without the expense of a mobile laboratory. We also have Utility Terrain Vehicles to reach remote sites, a 22-foot Parker boat and a 16-foot Tracker boat for projects requiring us to collect samples from or beneath surface waters, or to snorkel or dive.





Tab 6 References

RES is pleased to provide the following references demonstrating our experience in delivering projects with a scope similar to those requested in this RFQ. Each example highlights our ability to collaborate with public agencies, manage complex environmental and engineering tasks, and deliver high-quality results on schedule and within budget. The references provided include government agency clients.

Table 1. Reference Information

Project Name, Location, Years of Service	Client Contact Details	Brief Description of Work
<p>City of Fort Lauderdale General Engineering Services 2007 – Ongoing</p>	<p>Todd Hiteshew, Environmental Services Manager (954) 828-4357 thiteshew@fortlauderdale.gov</p>	<p>RES was awarded a contract with the City of Fort Lauderdale to provide ongoing environmental engineering support during three separate consultant selection processes. The scope of the contract is broad and has provided us with a wide range of opportunities to support the City including NPDES / Water Quality, Benthic Surveys, Wildlife Surveys / Relocations, Phase I and Phase II Environmental Site Assessments, Sampling, Agency Permitting, NEPA and Soil and Groundwater Testing services.</p>
<p>City of Miami Beach Environmental Engineering Continuing Services 2011 – Ongoing</p>	<p>Samantha Tiffany Environmental Resources Manager (305) 673-7000 Ext. 26032 SamanthaTiffany@miamibeachfl.gov</p>	<p>RES was awarded a contract with the City of Miami Beach to conduct environmental / coastal engineering services. Services include Groundwater Monitoring and Mapping, Sea Level Rise Evaluation, SPCC Plans, Environmental Engineering Controls, Environmental Site Assessments, Tree Inventories, Greenspace Canopy Assessment, Mooring Field Feasibility Study, Mooring Field Design and Permitting, Seawall Permitting, Benthic Surveys and Reporting, Water Quality Sampling Monitoring and Water Bacteria Sampling</p>
<p>Districtwide NPDES Permit Compliance Contract 2008 – Ongoing</p>	<p>Ms. Ivette Leiva, District Four NPDES Manager 954.777.4221 Ivette.Leiva@dot.state.fl.us</p>	<p>RES provides NPDES permit implementation and compliance services to FDOT District Four under this contract. Services provided by RES include preparation and submittal of Annual Reports to the FDEP each year for Phase I permits (Broward and Palm Beach Counties) and alternate years for Phase II permits (Treasure Coast); inspections of over 4,000 stormwater facilities and over 600 outfalls; annual inspections of the three FDOT maintenance yards; providing IDDE, Spill Prevention, and Construction Site Erosion Control training to FDOT maintenance employee; and providing miscellaneous support such as investigating IDDE reports and representing FDOT at NPDES meetings. RES has implemented numerous innovative tools to reduce inspection costs such as using tablets in the field to instantaneously generate reports and closely tracking maintenance trends to reduce inspection frequencies.</p>



Tab 7 Minority/Women (M/WBE) Participation

RES is not a Minority/Women (M/WBE), Disadvantaged or Historically Underutilized Business Enterprise (DBE/HUB). However, our team is committed to providing opportunities for such firms. We regularly subcontract specific elements of our projects to a range of professional service firms and vendor/supplier companies classified as WBEs, MBEs, and DBEs. The RES team is committed to providing opportunities for M/WBE subconsultants or subcontractors.

As part of our team for this contract, we have included **AirQuest**, a Woman Owned Small Business (WOSB) and a DBE that provides industrial hygiene and environmental services to federal and state agencies at locations throughout the United States and overseas.

State of Florida

Woman Business Certification

AirQuest Environmental, Inc.

Is certified under the provisions of
287 and 295.187, Florida Statutes, for a period from:

10/24/2023 to 10/24/2025

J. Todd Inman
Florida Department of Management Services



Office of Supplier Diversity
4050 Esplanade Way, Suite 380
Tallahassee, FL 32399
850-487-0915
www.dms.myflorida.com/osd



Tab 8 Sub-consultants

RES is pleased to team with two consulting firms as part of this contract.



AirQuest brings more than twenty-three (23) years of experience providing innovative solutions to environmental and industrial hygiene challenges. Recognized as a leader in the industry, AirQuest collaborates across disciplines and with diverse stakeholders to identify, assess, and improve environmental health and safety outcomes. Their core expertise includes environmental and industrial hygiene consulting, with specialized capabilities in hazardous materials management, asbestos and lead paint assessments, indoor air quality and radon evaluations, soil and groundwater investigations, and worker exposure monitoring. AirQuest combines the personalized service of a family-operated firm with the technical proficiency and professionalism expected from a Fortune 500 company, consistently delivering projects with attention to scope, schedule, and cost.

AirQuest is well known for its collaborative approach, building long-standing, mutually beneficial relationships with clients, contractors, and partners. Their culture emphasizes cross-training and professional growth, ensuring staff at every level understand both the technical and practical aspects of project execution. This deliberate integration of skills and perspectives has enabled AirQuest to successfully lead complex, multi-faceted projects by assembling and managing cross-functional teams tailored to project needs.

Their extensive portfolio includes work in military installations, government facilities, firing ranges, and marine environments, with clients such as the Department of the Navy, U.S. Fish and Wildlife Service, Bureau of Land Management, and the Smithsonian Institution. AirQuest's proven ability to manage projects of significant scale and complexity makes them a valuable partner on our team.

AirQuest maintains the following licenses.

- State of Florida Asbestos Business License ZA304
- EPA Certified Lead-Based Paint Activities LBP-16418-1
- State of Florida Radon Measurement Business RB2184

AirQuest has extensive expertise in asbestos and lead-based paint consulting services, including pre-demolition and pre-renovation surveys, risk assessments, abatement specifications, contractor oversight, air monitoring, and clearance testing. Their team includes Licensed Asbestos Consultants, EPA-certified Lead Inspectors and Risk Assessors, and certified Radon Measurement Technicians.



**Environment Testing
America**

Eurofins is being included on our team for National Environmental Laboratory Accreditation Program (NELAP) certified laboratory services. Eurofins is a nationally certified, full-service testing laboratory with a proud history of delivering analytical and environmental laboratory services since 1957. They have continuously supported a diverse clientele, including government entities, municipalities, utilities, commercial enterprises, and residential customers. Over the years, Eurofins has successfully engaged in a wide array of laboratory testing and sampling projects, proudly serving nearly four thousand clients on national, international, and regional levels.

Eurofins' facility is equipped with advanced scientific instrumentation and state-of-the-art computer systems that enhance our technological capabilities. They are recognized for their expertise across multiple categories, including Drinking Water, Non-Potable Water, and Solid and Chemical Materials analyses.



Tab 9 Required Forms

Following this page, RES has included the following required forms.

- a. Sample Insurance Certificate
- b. Local Business Preference Certification [if applicable]
- c. Disadvantaged Business Enterprise Preference Certification
- d. Questionnaire Sheet
- e. References Form
- f. Non-Collusion Statement
- g. Non-Discrimination Certification Form
- h. E-Verify Affirmation Statement
- i. Contract Payment Method
- j. Bid/Proposal Certification (labeled as Construction Bid Certification)
- k. Affidavit of Compliance with Foreign Entity Laws
 - included twice with slightly different formatting – both included.
- l. Drug-Free Workplace Programs Form
- Addendum 1



CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
10/15/2024

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

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

PRODUCER Aon Risk Insurance Services West, Inc. Denver CO office 200 Clayton Street, Suite 800 Denver CO 80206 USA	CONTACT NAME: PHONE (A/C. No. Ext.): (303) 758-7688 FAX (A/C. No.): (303) 758-9458	
	E-MAIL ADDRESS:	
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURED RES Florida Consulting, LLC dba E Sciences 34 E. Pine Street Orlando FL 32801 USA	INSURER A: Scottsdale Ins Company 41297	
	INSURER B: Capitol Specialty Insurance Corporation 10328	
	INSURER C: Federal Insurance Company 20281	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 570108952648 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	Limits shown as requested	
							LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:			VRS0007682	10/01/2024	10/01/2025	EACH OCCURRENCE	\$1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$350,000
							MED EXP (Any one person)	\$10,000
							PERSONAL & ADV INJURY	\$1,000,000
							GENERAL AGGREGATE	\$2,000,000
							PRODUCTS - COMP/OP AGG	\$2,000,000
C	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			54326777	10/08/2024	10/01/2025	COMBINED SINGLE LIMIT (Ea accident)	\$2,000,000
							BODILY INJURY (Per person)	
							BODILY INJURY (Per accident)	
							PROPERTY DAMAGE (Per accident)	
A	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION			VE50004735	10/01/2024	10/01/2025	EACH OCCURRENCE	\$5,000,000
							AGGREGATE	\$5,000,000
							Automobile Excess Limit	\$5,000,000
C	<input type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			54326778	10/08/2024	10/01/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER	
							E.L. EACH ACCIDENT	\$1,000,000
							E.L. DISEASE-EA EMPLOYEE	\$1,000,000
							E.L. DISEASE-POLICY LIMIT	\$1,000,000
A	Contractors Pollution Liability			VRS0007682 Prof/Poll - Claims Made	10/01/2024	10/01/2025	Aggregate Limit	\$2,000,000
							Per Claim Limit	\$1,000,000
							SIR/Deductible	\$25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Evidence of Insurance.

CERTIFICATE HOLDER For Proposal Purposes ONLY RES Florida Consulting, LLC dba E Sciences 34 E. Pine St. Orlando FL 32801 USA	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Aon Risk Insurance Services West, Inc.</i>

ACORD 25 (2016/03)

The ACORD name and logo are registered marks of ACORD

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Holder Identifier :

570108952648

Certificate No :





LOCAL BUSINESS PREFERENCE

Section 2-199.2, Code of Ordinances of the City of Fort Lauderdale, (Ordinance No. C-12-04), provides for a local business preference.

In order to be considered for a local business preference, a bidder must include the Local Business Preference Certification Statement of this ITB, as applicable to the local business preference class claimed **at the time of bid submittal**.

Upon formal request of the City, based on the application of a Local Business Preference the Bidder shall, within ten (10) calendar days, submit the following documentation to the Local Business Preference Class claimed:

- A) Copy of City of Fort Lauderdale current year business tax receipt, **or** Broward County current year business tax receipt, **and**
- B) List of the names of all employees of the bidder and evidence of employees' residence within the geographic bounds of the City of Fort Lauderdale or Broward County, as the case may be, such as current Florida driver license, residential utility bill (water, electric, telephone, cable television), or other type of similar documentation acceptable to the City.

Failure to comply at time of bid submittal shall result in the bidder being found ineligible for the local business preference.

THE COMPLETE LOCAL BUSINESS PREFERENCE ORDINANCE MAY BE FOUND ON THE CITY'S WEB SITE AT THE FOLLOWING LINK:

https://library.municode.com/fl/fort_lauderdale/codes/code_of_ordinances?nodet=COOR_CH2_AD_ARTVFI_DIV2PR_S2-186LOBUPR

Definitions: The term "Business" shall mean a person, firm, corporation or other business entity which is duly licensed and authorized to engage in a particular work in the State of Florida. Business shall be broken down into four (4) types of classes:

1. Class A Business – shall mean any Business that has established and agrees to maintain a permanent place of business located in a non-residential zone and staffed with full-time employees within the limits of the City **and** shall maintain a staffing level of the prime contractor for the proposed work of at least fifty percent (50%) who are residents of the City.
2. Class B Business - shall mean any Business that has established and agrees to maintain a permanent place of business located in a non-residential zone and staffed with full-time employees within the limits of the City **or** shall maintain a staffing level of the prime contractor for the proposed work of at least fifty percent (50%) who are residents of the City.
3. Class C Business - shall mean any Business that has established and agrees to maintain a permanent place of business located in a non-residential zone **and** staffed with full-time employees within the limits of Broward County.
4. Class D Business – shall mean any Business that does not qualify as either a Class A, Class B, or Class C business.



LOCAL BUSINESS PREFERENCE CERTIFICATION STATEMENT

The Business identified below certifies that it qualifies for the local business price preference classification as indicated herein, and further certifies and agrees that it will re-affirm its local preference classification annually no later than thirty (30) calendar days prior to the anniversary of the date of a contract awarded pursuant to this ITB. Violation of the foregoing provision may result in contract termination.

- (1) _____ is a **Class A** Business as defined in City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. A copy of the City of Fort Lauderdale current year Business Tax Receipt and a complete list of full-time employees and evidence of their addresses shall be provided within 10 calendar days of a formal request by the City.
Business Name
- (2) _____ is a **Class B** Business as defined in the City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. A copy of the Business Tax Receipt or a complete list of full-time employees and evidence of their addresses shall be provided within 10 calendar days of a formal request by the City.
Business Name
- (3) _____ is a **Class C** Business as defined in the City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. A copy of the Broward County Business Tax Receipt shall be provided within 10 calendar days of a formal request by the City.
RES Florida Consulting, LLC
Business Name
- (4) _____ requests a **Conditional Class A** classification as defined in the City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
Business Name
- (5) _____ requests a **Conditional Class B** classification as defined in the City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
Business Name
- (6) _____ is considered a **Class D** Business as defined in the City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186 and does not qualify for Local Preference consideration.
Business Name

BIDDER'S COMPANY: RES Florida Consulting, LLC

AUTHORIZED COMPANY PERSON: Justin Freedman  9/11/2025
 PRINT NAME SIGNATURE DATE



DISADVANTAGED BUSINESS ENTERPRISE (DBE) PREFERENCE

Section 2-185, Code of Ordinances of the City of Fort Lauderdale, provides for a disadvantaged business preference.

In order to be considered for a DBE Preference, a bidder must include a certification from a government agency, as applicable to the DBE Preference class claimed **at the time of bid submittal**.

Upon formal request of the City, based on the application of a DBE Preference the Bidder shall, within ten (10) calendar days, submit the following documentation to the DBE Class claimed:

A) Copy of City of Fort Lauderdale current year business tax receipt, **or** Broward County current year business tax receipt, **or** State of Florida active registration **and/or**

B) List of the names of all employees of the bidder and evidence of employees' residence within the geographic bounds of the City of Fort Lauderdale or Broward County, as the case may be, such as current Florida driver license, residential utility bill (water, electric, telephone, cable television), or other type of similar documentation acceptable to the City.

Failure to comply at time of bid submittal shall result in the bidder being found ineligible for the disadvantaged business preference.

THE COMPLETE DBE PREFERENCE ORDINANCE MAY BE FOUND ON THE CITY'S WEB SITE AT THE FOLLOWING LINK: <https://www.fortlauderdale.gov/home/showpublisheddocument?id=56883>

Definitions

- a. The term "disadvantaged class 1 enterprise" shall mean any disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the city, and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.
- b. The term "disadvantaged class 2 enterprise" shall mean any disadvantaged business enterprise that has established and agrees to maintain a permanent place of business within the limits of the city with a full-time employees and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.
- c. The term "disadvantaged class 3 enterprise" shall mean any disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the Tri-County area and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.
- d. The term "disadvantaged class 4 enterprise" shall mean any disadvantaged business enterprise that does not qualify as a Class A, Class B, or Class C business, but is located in the State of Florida and provides supporting documentation of its disadvantaged certification as established in the City's Procurement Manual.



DISADVANTAGED BUSINESS ENTERPRISE CERTIFICATION STATEMENT

The Business identified below certifies that it qualifies for the disadvantaged business enterprise price preference classification as indicated herein, and further certifies and agrees that it will re-affirm its preference classification annually no later than thirty (30) calendar days prior to the anniversary of the date of a contract awarded pursuant to this solicitation. Violation of the foregoing provision may result in contract termination.

(1) _____ is a disadvantaged class 1 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the city, and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

Business Name

(2) _____ is a disadvantaged class 2 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that has established and agrees to maintain a permanent place of business within the limits of the city with a full-time employee(s) and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

Business Name

(3) _____ is a disadvantaged class 3 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the Tri-County area and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

Business Name

(4) _____ is a disadvantaged class 4 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that does not qualify as a Class A, Class B, or Class C business, but is located in the State of Florida and provides supporting documentation of its disadvantaged certification as established in the City's Procurement Manual.


Business Name

(5) _____ is not considered a Disadvantaged Enterprise Business as defined in the City of Fort Lauderdale Ordinance Sec.2-185 and does not qualify for DBE Preference consideration.

RES Florida Consulting, LLC

Business Name

BIDDER'S COMPANY: RES Florida Consulting, LLC

AUTHORIZED COMPANY PERSON: Justin Freedman,
General Manager  9/11/2025
PRINT NAME SIGNATURE DATE



City of Fort Lauderdale

QUESTIONNAIRE SHEET

PLEASE PRINT OR TYPE:

Firm Name: RES Florida Consulting, LLC

President Justin Freedman, General Manager

Business Address:
Fort Lauderdale
312 SE 17th Street, Suite 200
Fort Lauderdale, FL 33316

Telephone: 954.484.8500

Fax:

N/A

E-Mail Address:

jfreedman@res.us

What was the last project of this nature which you completed? Include the year, description, and contract value.

Fort Lauderdale Continuing Contract for General Environmental Engineering | 2007 - Ongoing | \$958,853 | RES was awarded a contract with the City of Fort Lauderdale to provide ongoing environmental engineering support during three separate consultant selection processes. The scope of the contract is broad and has provided us with a wide range of opportunities to support the City including NPDES / Water Quality, Benthic Surveys, Wildlife Surveys / Relocations, Phase I and Phase II Environmental Site Assessments, Sampling, Agency Permitting, NEPA and Soil and Groundwater Testing services.

The following are named as three corporations and representatives of those corporations for which you have performed work similar to that required by this contract, and which the City may contact as your references (include addresses, telephone numbers and e-mail addresses). Include the project name, year, description, and contract value.

City of Fort Lauderdale | Todd Hiteshew | (954) 828-4357 | thiteshew@fortlauderdale.gov | 949 NW 38th Street, Fort Lauderdale, Florida 33309 | RES provides ongoing General Environmental Engineering Services.
City of Miami Beach | Samantha Tiffany | (305) 673-7000 Ext. 26032 | SamanthaTiffany@miamibeachfl.gov | 1700 Convention Center Drive, 3rd Floor, Miami Beach, Florida 33139 | RES provides ongoing environmental / coastal engineering services.
FDOT District Four | Ms. Ivette Leiva, 954.777.4221 | Ivette.Leiva@dot.state.fl.us | 3400 West Commercial Boulevard, Fort Lauderdale, FL 33309 | RES provides NPDES permit implementation and compliance services to FDOT District Four under this contract.

How many years has your organization been in business? 25

Have you ever failed to complete work awarded to you; if so, where and why?

No

The name of the qualifying agent for the firm and his position is: Peter Partlow, PE, Principal Engineer

Certificate of Competency Number of Qualifying Agent: PE - 8691

Effective Date: 10/10/2000

Expiration Date: Florida

Licensed in: Florida

Engineering Contractor's License # PE - 8691 | Orange | Florida

(County/State)

Expiration Date: 2/27/2027



NOTE: To be considered for award of this contract, the bidder must submit a financial statement upon request.

NOTE: Contractor must have proper licensing and shall provide copy of same with his proposal.

QUESTIONNAIRE SHEET

1. Have you personally inspected the proposed work and have you a complete plan for its performance? Task Work Order contract . RES is familiar with the services required for this contract.

2. Will you sublet any part of this work? If so, list the portions or specialties of the work that you will. Asbestos, mold and indoor air quality services and laboratory services will be supported by other firms.

Subcontractor Name	Description of Work
a) AirQuest Environmental, Inc.	Asbestos, mold and indoor air quality services
b) Eurofins Environment Testing	Laboratory services
c)	
d)	
e)	
f)	
g)	

3. What equipment do you own that is available for the work?
Field Vehicles, GPS Units, meters, probes, pumps, water level indicators, turbidity meters, measuring wheels, digital cameras, radios, wetland kits, gopher tortoise kits, hip chains, hand augers, manhole pullers, metal detectors, survey equipment, tool boxes, water level indicators, tablets, boats.

4. What equipment will you purchase for the proposed work?
Any additional equipment that may be required for environmental engineering tasks will be purchased.

5. What equipment will you rent for the proposed work?
RES has most of the equipment required for the services historically provided to the City. Anything that breaks in the middle of a task may be rented.



SPECIFIC REFERENCES FORM

The contractor shall have previous construction experience in the State of Florida with projects of similar scope and scale (or larger) as specified in the solicitation. Complete this form in its entirety. **Note: Do not include proposed team members or parent/subsidiary companies as references in your submittal.**

PRIME BIDDER'S NAME: RES Florida Consulting, LLC

CLIENT NO. 1 – Name of firm to be contacted: City of Fort Lauderdale

Address: 949 NW 38th Street, Fort Lauderdale, Florida 33309

Contact Person: Todd Hiteshew

Phone No: (954) 828-4357

Contact E-Mail Address: thiteshew@fortlauderdale.gov

Project Performance Period: 2007 to Present

Project Name: City of Fort Lauderdale General Engineering Services

Location of Project: City of Fort Lauderdale

Description of the overall scope:
RES was awarded a contract with the City of Fort Lauderdale to provide ongoing environmental engineering support during three separate consultant selection processes. The scope of the contract is broad and has provided us with a wide range of opportunities to support the City including NPDES / Water Quality, Benthic Surveys, Wildlife Surveys / Relocations, Phase I and Phase II Environmental Site Assessments, Sampling, Agency Permitting, NEPA and Soil and Groundwater Testing services.

Description of work that was self-performed by Bidder:
NPDES / Water Quality, Benthic Surveys, Wildlife Surveys / Relocations, Phase I and Phase II Environmental Site Assessments, Sampling, Agency Permitting, NEPA and Soil and Groundwater Testing services



SPECIFIC REFERENCES FORM

CLIENT NO. 2 – Name of firm to be contacted: City of Miami Beach

Address: 1700 Convention Center Drive, 3rd Floor, Miami Beach, Florida 33139

Contact Person: Samantha Tiffany

Phone No: (305) 673-7000 Ext. 26032

Contact E-Mail Address: SamanthaTiffany@miamibeachfl.gov

Project Performance Period: 2011 to Present

Project Name: Environmental Engineering Continuing Services

Location of Project: City of Miami Beach

Description of the overall scope:

RES was awarded a contract with the City of Miami Beach to conduct environmental / coastal engineering services. Services include Groundwater Monitoring and Mapping, Sea Level Rise Evaluation, Spill Prevention Control and Countermeasure (SPCC) Plans, Environmental Engineering Controls, Environmental Site Assessments, Tree Inventories, Greenspace Canopy Assessment, Mooring Field Feasibility Study, Seawall Permitting, Benthic Surveys and Reporting, Water Quality Sampling Monitoring and Water Bacteria Sampling.

Description of work that was self-performed by Bidder:

Groundwater Monitoring and Mapping, Sea Level Rise Evaluation, Spill Prevention Control and Countermeasure (SPCC) Plans, Environmental Engineering Controls, Environmental Site Assessments, Tree Inventories, Greenspace Canopy Assessment, Mooring Field Feasibility Study, Seawall Permitting, Benthic Surveys and Reporting, Water Quality Sampling Monitoring and Water Bacteria Sampling.



SPECIFIC REFERENCES FORM

CLIENT NO. 3 – Name of firm to be contacted: FDOT District Four

Address: 3400 West Commercial Boulevard, Fort Lauderdale, FL 33309

Contact Person: Ivette Leiva

Phone No: (954) 777-4221

Contact E-Mail Address: Ivette.Leiva@dot.state.fl.us

Project Performance Period: June 2008 to Present

Project Name: Districtwide NPDES Permit Compliance Contract

Location of Project: Broward, Indian River, Martin, Palm Beach, and St. Lucie Counties, FL

Description of the overall scope:

RES supports FDOT District Four with comprehensive NPDES permit implementation and compliance services across both Phase I (Broward and Palm Beach Counties) and Phase II (the Treasure Coast) areas. Our work includes preparing and submitting annual reports, inspecting thousands of stormwater facilities and outfalls, conducting maintenance yard reviews, providing training programs, and offering technical support for illicit discharge detection, spill prevention, and erosion control. RES has streamlined inspection and reporting through innovative tools such as tablet-based field reporting and GIS database integration, while also playing a key role in TMDL and BMAP compliance by developing basin GIS layers, calculating pollutant loads, and preparing technical reports and progress updates. Notably, RES provided the first FDEP-approved Bacteria Pollution Control Plan and contributed to the successful delisting of the Pompano Canal TMDL. Under the latest permit cycle, we continue to partner with FDOT and local stakeholders to address bacteria TMDLs, develop BPCPs, and prepare Assessment Programs, all of which have been approved without comments, reinforcing RES's reputation as a trusted technical and regulatory partner.

Description of work that was self-performed by Bidder:

RES self-performs the full range of NPDES compliance services, ensuring quality control and efficiency at every stage. Our team conducts field inspections of stormwater facilities, outfalls, and maintenance yards; delivers training directly to FDOT staff; investigates illicit discharge reports; and prepares required reports and technical documentation in-house. We also manage all GIS data collection, digitization, and system updates internally, allowing seamless integration of new construction data and as-built plans. By performing these services ourselves, RES provides FDOT with consistent, reliable, and cost-effective support while maintaining a high standard of technical accuracy.



NON-COLLUSION STATEMENT

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

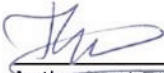
In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

- 3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g., ownership of five (5) percent or more).
- 3.4. Immediate family members (spouse, parents, and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

<u>NAME</u>	<u>RELATIONSHIPS</u>
None _____	_____
_____	_____
_____	_____
_____	_____

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.



 Authorized Signature

Justin Freedman

 Name (Printed)

General Manager

 Title

9/11/2025

 Date

Rev 09-2022



**CONTRACTOR'S CERTIFICATE OF COMPLIANCE WITH
NON-DISCRIMINATION PROVISIONS OF THE CONTRACT**

The completed and signed form should be returned with the Contractor's submittal. If not provided with submittal, the Contractor must submit within three business days of City's request. Contractor may be deemed non-responsive for failure to fully comply within stated timeframes.

Pursuant to City Ordinance Sec. 2-17(a)(i)(ii), bidders must certify compliance with the Non-Discrimination provision of the ordinance.

- A. Contractors doing business with the City shall not discriminate against their employees based on the employee's race, color, religion, gender (including identity or expression), marital status, sexual orientation, national origin, age, disability, or any other protected classification as defined by applicable law.

Contracts. Every Contract exceeding \$100,000, or otherwise exempt from this section shall contain language that obligates the Contractor to comply with the applicable provisions of this section.

The Contract shall include provisions for the following:

- (i) The Contractor certifies and represents that it will comply with this section during the entire term of the contract.
- (ii) The failure of the Contractor to comply with this section shall be deemed to be a material breach of the contract, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.

Authorized Signature

Justin Freedman, General Manager

Print Name and Title

9/11/2025

Date



E-VERIFY AFFIRMATION STATEMENT

Solicitation/Bid /Contract No: RFQ EVENT No. 501

Project Description:
Environmental Engineering Consulting Services, Continuing Services

Contractor/Proposer/Bidder acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of,

- A. all persons employed by Contractor/Proposer/Bidder to perform employment duties within Florida during the term of the Contract, and,
- B. all persons (including subcontractors/vendors) assigned by Contractor/Proposer/Bidder to perform work pursuant to the Contract.

The Contractor/Proposer/Bidder acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the Contract is a condition of the Contract.

Contractor/Proposer/ Bidder Company Name: RES Florida Consulting, LLC

Authorized Company Person's Signature: 

Authorized Company Person's Title: Justin Freedman, General Manager

Date: 9/11/2025



CONTRACT PAYMENT METHOD

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to credit card payments via MasterCard or Visa as part of this program.

This allows you as a vendor of the City of Fort Lauderdale to receive your payments fast and safely. No more waiting for checks to be printed and mailed.

In accordance with the contract, payments on this contract will be made utilizing the City's P-Card (MasterCard or Visa). Accordingly, bidders must presently have the ability to accept the credit card or take whatever steps necessary to implement acceptance of a card before the start of the contract term, or contract award by the City.

All costs associated with the Contractor's participation in this purchasing program shall be borne by the Contractor. The City reserves the right to revise this program as necessary.

By signing below, you agree with these terms.

Please indicate which credit card payment you prefer:

MasterCard

Visa

RES Florida Consulting, LLC

Company Name

Justin Freedman

Name (Printed)

Signature

General Manager

Title

9/11/2025

Date

Rev. 09/2022_ip



City of Fort Lauderdale

CONSTRUCTION BID CERTIFICATION

Please Note: It is the sole responsibility of the bidder to ensure that his bid is submitted electronically through www.BidSync.com prior to the bid opening date and time listed. Paper bid submittals will not be accepted. All fields below must be completed. If the field does not apply to you, please note N/A in that field.

If you are a foreign corporation, you may be required to obtain a certificate of authority from the Department of State, in accordance with Florida Statute §607.1501 (visit http://www.dos.state.fl.us/).

Company: (Legal Registration) RES Florida Consulting, LLC
Address: 34 E. Pine Street
City: Orlando State: FL Zip: 32801
Telephone No.: 407.481.9008 FAX No.: N/A Main Contact Email Address: revitek@res.us

Check box if your firm qualifies for MBE / SBE / WBE: []

If a corporation, state the name of the President, Secretary and Resident Agent. If a partnership, state the names of all partners. If a trade name, state the names of the individuals who do business under the trade name.

Table with 4 columns: Name, Title, Name, Title. Includes Roger Wiederkehr (President and Chief Executive Officer), Ben Eubanks (Vice President & Regional General Manager, East), Lorne Phillips (Chief Financial Officer), and Justin Freedman (General Manager, Region 8, Florida).

ADDENDUM ACKNOWLEDGEMENT - Bidder acknowledges that the following addenda have been received and are included in the proposal:

Table with 6 columns: Addendum No., Date Issued, Addendum No., Date Issued, Addendum No., Date Issued. Includes entries for Addendum No. 1 (8/26/2025) and 2 (labeled 1) (9/10/2025).

VARIANCES: If you take exception or have variances to any term, condition, specification, or requirement in this bid you must specify such variance in the space provided below or reference in the space provided below all variances contained on other pages within your bid. Additional pages may be attached if necessary. No variances will be deemed to be part of the bid submitted unless such is listed and contained in the space provided below. The City does not, by virtue of submitting a variance, necessarily accept any variances. If no statement is contained in the below space, it is hereby implied that your response is in full compliance with this competitive solicitation. If you do not have variances, simply mark N/A. You must also click the "Take Exception" button.

The below signatory affirms that he has or will obtain all required permits and licenses from the appropriate agencies, and that his firm is authorized to do business in the State of Florida. The below signatory agrees to furnish all labor, tools, material, equipment and supplies, and to sustain all the expense incurred in doing the work set forth in strict accordance with the bid plans and contract documents at the unit prices indicated if awarded a contract. The below signatory has not divulged to, discussed, or compared this bid with other bidders, and has not colluded with any other bidder or parties to this bid whatsoever. Furthermore, the undersigned guarantees the truth and accuracy of all statements and answers contained in this bid. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a bid, that in no event shall the City's liability for bidder's direct, indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of Five Hundred Dollars (\$500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.

Submitted by:

Submitted by: Justin Freedman (Name printed), 9/11/2025 (Date), [Signature] (Signature), General Manager (Title)



**AFFIDAVIT OF COMPLIANCE WITH FOREIGN ENTITY LAWS
(Florida Statute- §287.138, 692.201, 692.202, 692.203, and 692.204)**

The undersigned, on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Entity is not owned by the government of a foreign country of concern as defined in Section 287.138, Florida Statutes. (Source:§ 287.138(2)(a), Florida Statutes)
2. The government of a foreign country of concern does not have a controlling interest in Entity. (Source:§ 287.138(2)(b), Florida Statutes)
3. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern. (Source: § 287.138(2)(c), Florida Statutes)
4. Entity is not owned or controlled by the government of a foreign country of concern, as defined in Section 692.201, Florida Statutes. (Source:§ 288.007(2), Florida Statutes)
5. Entity is not a partnership, association, corporation, organization, or other combination of persons organized under the laws of or having its principal place of business in a foreign country of concern, as defined in Section 692.201, Florida Statutes, or a subsidiary of such entity. (Source: § 288.007(2), Florida Statutes)
6. Entity is not a foreign principal, as defined in Section 692.201, Florida Statutes. (Source: § 692.202(5)(a)(I), Florida Statutes)
7. Entity is in compliance with all applicable requirements of Sections 692.202, 692.203, and 692.204, Florida Statutes.
8. **(Only applicable if purchasing real property)** Entity is not a foreign principal prohibited from purchasing the subject real property. Entity is either (a) not a person or entity described in Section 692.204(1)(a), Florida Statutes, or (b) authorized under Section 692.204(2), Florida Statutes, to purchase the subject property. Entity is in compliance with the requirements of Section 692.204, Florida Statutes. (Source:§§ 692.203(6)(a), 692.204(6)(a), Florida Statutes)
9. The undersigned is authorized to execute this affidavit on behalf of Entity.

Name: Justin Freedman Title: General Manager Entity: RES Florida Consulting, LLC

Signature:  Date: 9/11/2025

NOTARY PUBLIC ACKNOWLEDGEMENT SECTION

STATE OF Florida
COUNTY OF Orange

The foregoing instrument was acknowledged before me, by means of physical presence or online notarization, this 11th day of September 2025, by Justin Freedman, as

General Manager for RES Florida Consulting, LLC, who is

personally known to me or who has produced _____

as identification _____

Notary Public

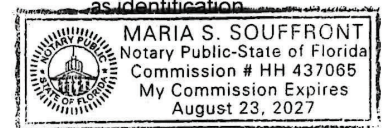
Signature: 

Print Name: Maria S. Souffront

(Notary Seal)

My commission

expires: 8/23/27






**AFFIDAVIT OF COMPLIANCE WITH FOREIGN ENTITY LAWS
(Florida Statute- §287.138, 692.201, 692.202, 692.203, and 692.204)**

The undersigned, on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

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4. Entity is not owned or controlled by the government of a foreign country of concern, as defined in Section 692.201, Florida Statutes. (Source:§ 288.007(2), Florida Statutes)
5. Entity is not a partnership, association, corporation, organization, or other combination of persons organized under the laws of or having its principal place of business in a foreign country of concern, as defined in Section 692.201, Florida Statutes, or a subsidiary of such entity. (Source: § 288.007(2), Florida Statutes)
6. Entity is not a foreign principal, as defined in Section 692.201, Florida Statutes. (Source: § 692.202(5)(a)(I), Florida Statutes)
7. Entity is in compliance with all applicable requirements of Sections 692.202, 692.203, and 692.204, Florida Statutes.
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The undersigned is authorized to execute this affidavit on behalf of Entity.

Name: Justin Freedman Title: General Manager Entity: RES Florida Consulting, LLC

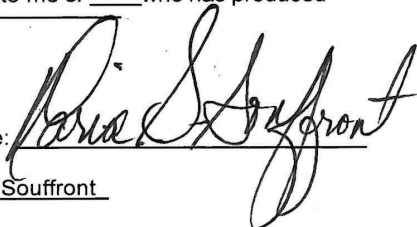
Signature:  Date: 9/11/25

NOTARY PUBLIC ACKNOWLEDGEMENT SECTION

STATE OF Florida

COUNTY OF Orange

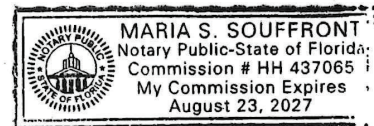
The foregoing instrument was acknowledged before me, by means of physical presence or online notarization, this 11th day of September 2025, by Justin Freedman, as General Manager for RES Florida Consulting, LLC, who is personally known to me or who has produced _____ as identification.

Notary Public Signature: 
Print Name: Maria S. Souffront

(Notary Seal)

My commission

expires: 8/23/27





CITY OF FORT LAUDERDALE


**SWORN STATEMENT PURSUANT TO SECTION 287.087, FLORIDA
STATUTES, ON PREFERENCE TO BUSINESS WITH
DRUG-FREE WORK PLACE PROGRAMS**

I certify that I have established a Drug Free Work Place program and have complied with the following

- a. Published and distributed to each employee a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibitions.
- b. Required all new employees to undergo laboratory testing as a condition of employment and will require all employees, as a condition of their continued employment, to undergo laboratory testing to detect illegal drug or alcohol use according to Florida Statutes 440.101 and 440.102.
- c. Ensured that applicants with a confirmed positive drug or alcohol screening test result are not considered for employment.
- d. Have tested employees when reasonably suspected of illegal drug or alcohol use.
- e. Ensured that any employee refusing to take a drug or alcohol screening test in violation of the Drug Free Work Place Policy is subject to dismissal for failure to abide by the provisions of the Policy.
- f. Informed employees about the dangers of drug abuse in the workplace, the business' policy of maintain a drug-free workplace, any available drug counseling, rehabilitation and employee assistance programs and the penalties that may be imposed upon employees for drug abuse violations.
- g. In the statement specified in subparagraph a, notified the employees that, as a condition of their employment, the employee will abide by the terms of the statement and will notify their employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States of any state, for a violation occurring in the workplace no later than 5 days after such conviction.



- h. Have required all employees to sign a copy of this statement of compliance acknowledging their understanding and agreeing to abide with the requirements of the Drug Work Place Policy.
- i. Will impose a sanction on or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by, any employee who is so convicted.
- j. Am making a good faith effort to continue to maintain a Drug Free Work Place through implementation of this document.

BY:  DATE: 9/15/2025
NAME (Printed) Justin Freedman TITLE: General Manager
COMPANY NAME: RES Florida Consulting, LLC

Affix Company Seal





City of Fort Lauderdale • Procurement Services Division
 100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301
 954-828-5933 Fax 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 1

Event 501
 Environmental Engineering Consulting Services
 ISSUED: September 10, 2025

This addendum is being issued to clarify the information in a previously answered question:

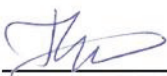
1. In our Question and Answer section within Infor, our online strategic sourcing platform, we received two questions as to whether the Trench Safety Form is required for this solicitation.

Conflicting information was inadvertently provided in response. We would like to clarify that the Trench Safety Form is not required, as this project pertains solely to professional engineering services and does not constitute a construction project. Accordingly, proposers are not required to submit the Trench Safety Form in their submittal.

All other terms, conditions, and specifications remain unchanged.

Erick Martinez
 Senior Procurement Specialist

Company Name: RES Florida Consulting, LLC
 (please print)

Bidder's Signature: 
 Justin Freedman, General Manager

Date: 9/11/2025

