# Finding of No Significant Impact for the Proposed Physical Design Testbed at Florida International University Miami, Florida

**National Science Foundation**


**September 27, 2022**

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Finding of No Significant Impact

The National Science Foundation (NSF), in consultation with the Florida International University (FIU), has prepared an environmental assessment (EA) pursuant to the Council on Environmental Quality Regulations (*Code of Federal Regulations* [C.F.R.] Title 40, Parts 1500 through 1508) for implementing the National Environmental Policy Act (NEPA) (42 *United States Code* [U.S.C.] Section 4231, *et seq*.) and NSF's NEPA implementing regulations at 45 CFR Part 640 to evaluate the potential environmental impacts associated with the construction and operation of a Physical Design Testbed (PDT) on the FIU campus in Miami, Florida. As presented in the EA, which is incorporated herein by reference and attached, resource areas were analyzed for environmental impacts and no significant impacts are anticipated. In compliance with Executive Order 11988, "Floodplain Management," and as documented in Appendix F of the EA, there are no practicable alternatives and there would be no long-term adverse impact to floodplains from implementation of the proposed project.

As described in the EA, on May 19, 2022, the Florida State Historic Preservation Officer determined that the project would have no effect on historic properties and requested the following special condition (see also Attachment 1)**:**

> If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

Correspondence with state environmental agencies, coordinated through the Florida State Clearinghouse, is documented in Attachment 1. In its letter dated August 16, 2022, The Florida State Clearinghouse stated that based upon the size of the proposed project site (less than 10 acres), the project would qualify for a 10/2 General Permit Self-Certification[1] for the construction, alteration, and maintenance of a stormwater management system serving a total project area of up to 10 acres, with less than 2 acres of impervious surface, in accordance with Section 403.814(12), Florida Statutes. The Florida State Clearinghouse also concluded that, based on the information submitted and the minimal project impacts, the State has no objection to the subject project and, therefore, it is consistent with the Florida Coastal Management Program.

If granting approval to use NSF-provided funds for the construction of the PDT, NSF would include the above special condition through an amendment to its existing cooperative agreement with FIU, and would require that FIU comply with permitting requirements, including those referenced by the Florida State Clearinghouse.

The EA is posted on NSF's website at https://www.nsf.gov/eng/research-infrastructure/environmental-assessment.jsp[2] and is also provided as Attachment 2. The notice of availability of the EA was advertised in the *The Miami Herald*, *El Nuevo Herald*, and *Miami Today* on July 31, 2022 (*The Miami Herald* and *El Nuevo Herald*) and August 4, 2022 (*Miami Today*) as documented in Attachment 3. Hard copies of the EA were made available to the public at the following three libraries: Steve and Dorothea Green Library, Fairlawn Branch Library, and International Mall Branch Library. No comments were received during the 30-day comment period (July 31-August 30, 2022.)

[1] The 10/2 General Permit Self-Certification is a type of Environmental Resource Permit (Chapter 62-330 Florida Administrative Code)

[2] Note that the website address in the Environmental Assessment for the Proposed Physical Design Testbed at Florida International University, Miami, Florida, July 29, 2022, should be corrected to https://www.nsf.gov/eng/research-infrastructure/environmental-assessment.jsp.

Based on the foregoing, NSF has determined that funding of the construction and operation of the PDT would not result in significant environmental impacts and does not require the preparation of an environmental impact statement, as documented by this Finding of No Significant Impact (FONSI).

Joy Pauschke _____ September 27, 2022

Joy Pauschke, Ph.D., P.E. Date

Program Director, Division of Civil, Mechanical and Manufacturing Innovation

Attachments

1 Additional Agency Correspondence

2 Environmental Assessment for the Proposed Physical Design Testbed at Florida International University, Miami, Florida, July 29, 2022

3 Newspaper Notice Affidavits

# Attachment 1
# Additional Agency Correspondence

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FLORIDA DEPARTMENT of STATE

**RON DESANTIS**
Governor

**CORD BYRD**
Secretary of State

Kristen Hamil
Environmental Compliance Officer
National Science Foundation
2415 Eisenhower Avenue
Alexandria, Virginia 22314

May 19, 2022

RE: DHR Project File No.: 2022-2815
Project: *Testbed Building Florida International University, Wall of Wind*
County: Dade

Ms. Hamil:

The Florida State Historic Preservation Officer reviewed the referenced project for possible effects on historic properties listed, or eligible for listing, in the *National Register of Historic Places.* The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, and its implementing regulations in *36 CFR Part 800: Protection of Historic Properties.*

It is the opinion of this office that the proposed project will have no effect on historic properties. However, due to ground disturbing activities, the following special condition regarding unexpected discoveries should be included during project activities:

- If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, *Florida Statutes*.

If you have any questions, please contact Alayna Gould, Historic Preservationist, by email at *Alayna.Gould@dos.myflorida.com*, or by telephone at 850-245-6343.

Sincerely,


Timothy A Parsons, Ph.D.
Director, Division of Historical Resources
& State Historic Preservation Officer

**Subject:** [EXTERNAL] - State Clearance Letter for FL202206239531C-Construction and Operation of a Physical Design Testbed (PDT) on the Florida International University Campus In Miami, Miami-Dade County,
**Date:** Tuesday, August 16, 2022 at 2:47:05 PM Eastern Daylight Time
**From:** Stahl, Chris
**To:** Hamilton, Kristen
**CC:** State_Clearinghouse



August 16, 2022

Kristen Hamilton
National Science Foundation
2415 Eisenhower Avenue
Alexandria, Virginia 22314

RE: National Science Foundation -Construction and Operation of a Physical Design Testbed (PDT) on the Florida International University Campus In Miami, Miami-Dade County, Florida
SAI # FL202206239531C

Dear Kristen:

Florida State Clearinghouse staff has reviewed the proposal under the following authorities: Presidential Executive Order 12372; § 403.061(42), Florida Statutes; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

Based upon the size of the proposed project site (less than 10 acres) the project would qualify for a 10/2 General Permit Self-Certification for the construction, alteration, and maintenance of a stormwater management system serving a total project area of up to 10 acres, with less than 2 acres of impervious surface, in accordance with Section 403.814(12), Florida Statutes. Please contact the SFWMD: email erpreapp@sfwmd.gov to schedule a pre-application meeting with staff if there are further questions.

If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes. A review of the Florida Master Site File indicates that the project area has only been partially surveyed for archaeological and historical properties. Since conditions in the area are favorable for the presence of these kinds of resources, we request that the project area be subjected to a professional cultural resources assessment survey. The resultant survey report should conform to the provisions of Chapter 1A-46, Florida Administrative Code, and should be sent to our office upon completion. The report will help us

complete the Section 106 review process and provide concurrence on federal determinations of effect, and recommend any necessary avoidance or mitigation measures. If you have any questions, please contact Mercedes Harrold, Historic Preservationist, by email at Mercedes.Harrold@dos.myflorida.com, or by telephone at 850.245.6342 or 800.847.7278.

Based on the information submitted and minimal project impacts, the state has no objections to the subject project and, therefore, it is consistent with the Florida Coastal Management Program (FCMP). The state's final concurrence of the project's consistency with the FCMP will be determined during any environmental permitting processes, in accordance with Section 373.428, Florida Statutes.

Thank you for the opportunity to review the proposed plan. If you have any questions or need further assistance, please don't hesitate to contact me at (850) 717-9076.

Sincerely,

*Chris Stahl*

Chris Stahl, Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Blvd., M.S. 47
Tallahassee, FL 32399-2400
ph. (850) 717-9076
Chris.Stahl@floridadep.gov

Dep Customer Survey

**Subject:** RE: [EXTERNAL] - SHPO Review: Testbed Building FIU
**Date:** Wednesday, September 7, 2022 at 11:32:56 AM Eastern Daylight Time
**From:** Gould, Alayna R.
**To:** Hamilton, Kristen
**Attachments:** 2022 2815_NSF_Miami_NoEffect_FF_Gould.pdf, 2022 2815 B_National Science Foundation_State Clearinghouse_NoEffect_FF_Gould.pdf

Good morning,

Our office did not request a survey for this project. I provided a letter to the Florida State Clearinghouse on 7/22/22 with a no effect determination and a special condition for fortuitous finds. Please see the letters attached to this email. Section 106 consultation is complete for this project (DHR Number: 2022-2815 and 2022-2815-B).

Mercedes Harrold was a Section 106 Reviewer from 2017-2019. I looked through our database and could not find any record of her previously reviewing this project. I will provide the Florida State Clearinghouse with a letter noting that SHPO did not request a survey for this project.

Please let me know if you have any additional questions,

Alayna Gould

---

**From:** Hamilton, Kristen <KRIHAMIL@nsf.gov>
**Sent:** Tuesday, September 6, 2022 3:00 PM
**To:** Gould, Alayna R. <Alayna.Gould@dos.myflorida.com>
**Subject:** Re: [EXTERNAL] - SHPO Review: Testbed Building FIU



Good afternoon, Ms. Gould,

Back in May we (the National Science Foundation) completed consultation with your office on the referenced project (DHR Project File No.: 2022-2815), and you provided a no effect finding (letter dated May 19, attached), with the special condition regarding unexpected discoveries. In response to our related Environmental Assessment, we recently received a Florida State Clearinghouse letter that required this same special condition, but then also requested a survey in order to complete Section 106 consultation, referencing Mercedes Harrold as the contact.

Mercedes Harrold as the contact.

I inquired with the clearinghouse coordinator about this last measure, since it had seemed that Section 106 consultation was complete and a survey was not required. Based on follow-ups with him and Michael Debose of your office, it seemed that these lines may have been erroneously provided, and that Ms. Harrold had not reviewed the project. I was instructed to check with you to resolve this (see attached email chain from Chris Stahl). I appreciate if you can confirm your own understanding of this, and whether our consultation was complete as of last May, or whether we do need to reopen the consultation and complete a survey? I'm sorry for any inconvenience.

Many thanks for your assistance with this, and for your earlier review.

Kristen

---

**From:** "Gould, Alayna R." <Alayna.Gould@dos.myflorida.com>
**Date:** Thursday, May 19, 2022 at 4:27 PM
**To:** "Hamilton, Kristen" <KRIHAMIL@nsf.gov>
**Subject:** [EXTERNAL] - SHPO Review: Testbed Building FIU



Please see the attached letter from the Florida State Historic Preservation Office.

Thank you,

Alayna Gould


# Alayna Gould

Historic Preservationist I Bureau of Historic Preservation I Division of Historical Resources I Florida Department of State I 500 South Bronough Street I Tallahassee, Florida 32399
I 850.245.6343 I 1.800.847.7278 I www.flheritage.com

# Attachment 2
# Environmental Assessment for the Proposed Physical Design Testbed at Florida International University, Miami, Florida, July 29, 2022

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# Environmental Assessment for the Proposed Physical Design Testbed at Florida International University Miami, Florida

**National Science Foundation**


**July 29, 2022**

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# Contents

**Tables**



**Figures**

# Acronyms and Abbreviations

| Acronym | Definition |
|---|---|
| BMP | Best Management Practice |
| CAA | Clean Air Act of 1970 |
| CEQ | Council on Environmental Quality |
| C.F.R. | *Code of Federal Regulations* |
| CZMA | Coastal Zone Management Act |
| dB | Decibel(s) |
| dBA | A-weighted Decibel(s) |
| EA | Environmental Assessment |
| EJ | Environmental Justice |
| EO | Executive Order |
| EPA | U.S. Environmental Protection Agency |
| ESA | Endangered Species Act |
| FEMA | Federal Emergency Management Agency |
| FHWA | Federal Highway Administration |
| FIU | Florida International University |
| FPL | Florida Power and Light |
| FRP | Fiberglass Reinforced Plastic |
| FWCC | Fish and Wildlife Conservation Commission |
| GHG | Greenhouse Gas |
| m/s | Meter(s) per Second |
| MDWASD | Miami Dade Water and Sewer Department |
| mph | Mile(s) per Hour |
| NAAQS | National Ambient Air Quality Standards |
| NEPA | National Environmental Policy Act of 1969 |
| NHERI | Natural Hazards Engineering Research Infrastructure |
| NICHE | National Full-scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge, and Wave Events |
| NHPA | National Historic Preservation Act of 1966 |
| NSF | National Science Foundation |
| PDT | Physical Design Testbed |

| | |
|---|---|
| ROI | Radius of Influence |
| SHPO | State Historic Preservation Officer |
| U.S.C. | *United States Code* |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| WOW | Wall of Wind |

# 1. Purpose and Need for the Proposed Action

The National Science Foundation (NSF), in consultation with the Florida International University (FIU), has prepared this Environmental Assessment (EA) to evaluate the potential effects of NSF's authorization of the use of NSF-awarded funds for the construction and operation of a Physical Design Testbed (PDT) on the FIU campus in Miami, Florida.

This EA was prepared in accordance with the following:

- National Environmental Policy Act of 1969 (NEPA) (*United States Code* [U.S.C.] Title 42, Sections (§§) 4321, *et seq*.)
- Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (*Code of Federal Regulations* [C.F.R.] Title 40, Parts 1500–1508); and NSF procedures for implementing NEPA and CEQ regulations (45 C.F.R. Part 640).
- Endangered Species Act (ESA) of 1973 (16 U.S.C. §§ 1531, *et seq*.)
- National Historic Preservation Act (NHPA) of 1966 (54 U.S.C. §§ 300101, *et seq*.)

The public is invited to comment on this EA.
Comments may be submitted to Joy Pauschke, Ph.D., P.E., at engineering@nsf.gov
and will be accepted through August 31, 2022.

## 1.1 Project Background and Location

The PDT would be located north of the existing Natural Hazards Engineering Research Infrastructure[1] (NHERI) Wall of Wind (WOW) at the FIU Engineering Campus (Figure 1-1), which is less than a mile northeast of FIU's Main Campus. NHERI WOW allows researchers to perform destructive tests on structures in simulated Category 5 Hurricane on the Saffir-Simpson wind scale and simulated rain conditions (FIU, 2016). The WOW is powered by a combined 12-fan system that creates up to 157-mile-per-hour (mph) wind speeds along with a water spray system that simulates the effects of wind-driven rain. The PDT would simulate larger hurricane events as described in Section 1.2, *Purpose and Need*. Additional details of the PDT are provided in Section 2.1, *Proposed Action*.

[1] NHERI is a distributed, multi-user, national network that provides the natural hazards engineering and social science community with state-of-the-art research infrastructure that is designed to help enhance community resilience.

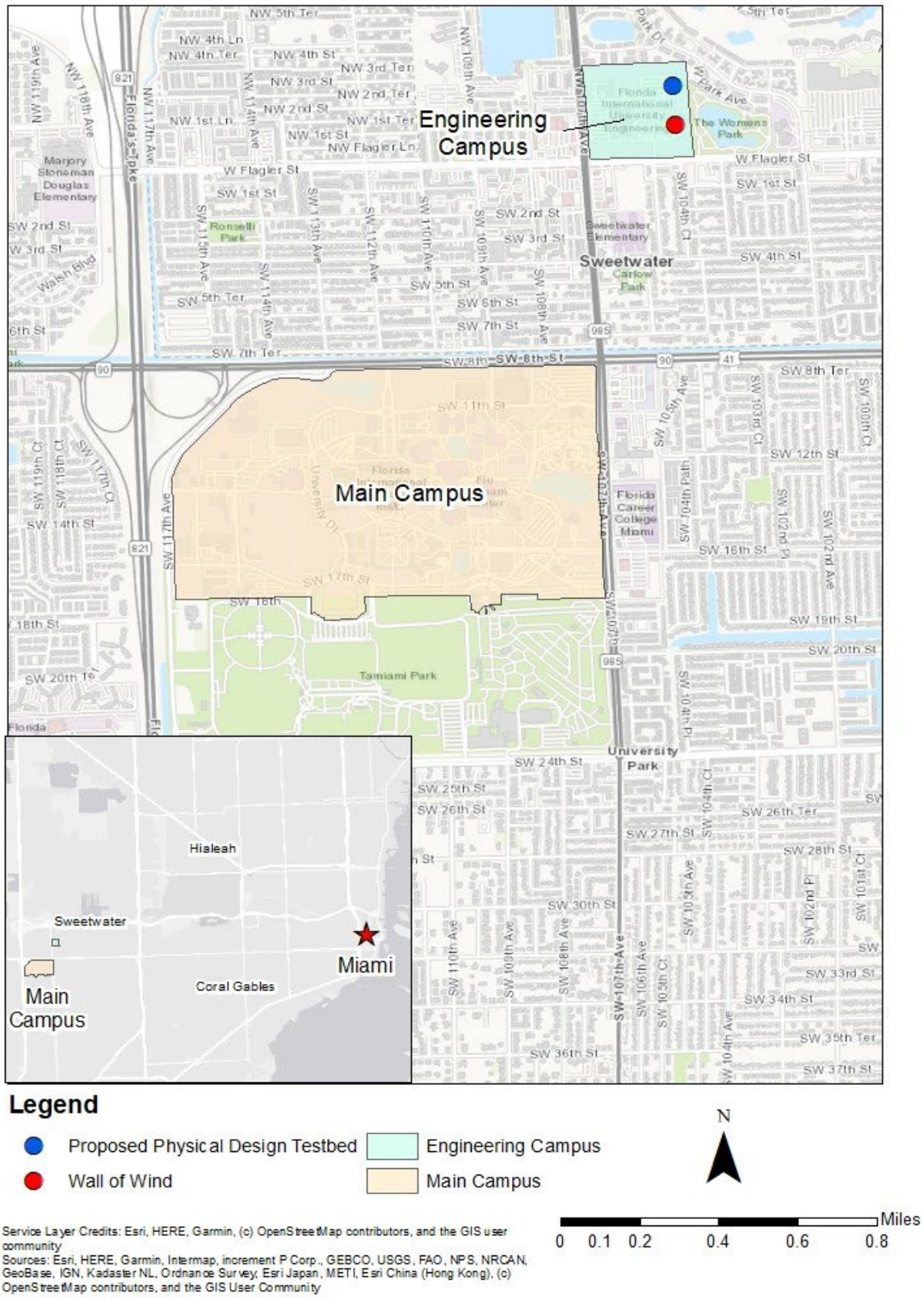


**Figure 1-1. Location of Florida International University Main and Engineering Campus**

## 1.2 Purpose and Need

In December 2021, NSF issued a Mid-scale Research Infrastructure-1 award (NSF award 2131961) to FIU to support the design of a National Full-scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge, and Wave Events (NICHE). FIU has provided the following description for NICHE in its documentation submitted to NSF:

> The proposed [Mid-scale Research Infrastructure] -- National Full-Scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge and Wave Events, "NICHE" (NICHE) -- aims the simulation of severe natural hazards, i.e., high wind events (synoptic and non-synoptic), storm surge and waves, overland flow, and their interaction with the built environment. Currently, there is no experimental facility in the world with (near) full-scale combined capabilities. Moreover, (i) most existing facilities are able to simulate only one of the aforementioned natural hazards independently, and (ii) in those facilities where these hazards can be simulated simultaneously, the facility dimensions and, therefore, the scale, are significantly reduced and simplified.
>
> NICHE is envisioned to have integrated capabilities to simulate extreme event conditions (up to ~95 m/s winds across range of flow types … and ~2.3 m waves) in a controlled laboratory environment large enough to test full-size structures and even support scaled modeling of entire communities.[2]

To aid in the design of the full-scale NICHE, FIU intends to seek NSF's approval to use NICHE funds to construct a prototype smaller-scale PDT. The purpose of the PDT is to inform the design of NICHE by providing proof-of-concept and validation of empirical models. The PDT is needed to test and prove a subset of eventual full-scale NICHE equipment, demonstrate the physics of full-scale NICHE conditions, and answer key scientific, technical, and operational questions relating to the feasibility of a full-scale NICHE.

[2] NSF Award Search: Award # 2131961 - Mid-scale RI-1 (M1:DP): National Full-Scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge, and Wave Events (NICHE) (https://nsf.gov/awardsearch/showAward?AWD_ID=2131961)

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# 2. Description of the Proposed Action and Alternatives

## 2.1 Proposed Action

The Proposed Action is for NSF to authorize the use of NSF-awarded funds for the construction and operation of a PDT on the FIU campus in Miami, Florida. Under the Proposed Action, FIU would construct a PDT to experimentally simulate the impact of large hurricane events using extreme winds combined with storm surge and wave actions on different types of civil infrastructure. The proposed NICHE infrastructure would consist of an 8,500-square-foot light industrial building approximately 170 feet in length and 50 feet in width.

Equipment inside the PDT would include a fan system for wind speeds up to 213 mph and a 12-foot-wide by 9-foot-high fiberglass reinforced plastic (FRP) water channel. Electricity for the facility would be provided by Florida Power and Light (FPL); generators or other diesel-powered equipment would not be needed. Water and sewer for the facility would be provided by Miami Dade Water and Sewer Department (MDWASD) and storage tanks would be used to facilitate water recycling as much as possible. The FIU engineering campus has sufficient parking for the expected users of the proposed PDT facility. Site access would be controlled by use of a security fence. The building would also include skylights and ventilators, 660 square feet of air-conditioned interior office space, and two bathrooms.

FIU may determine that the wave simulations could be conducted in a facility at another university and the PDT at FIU could consist of a smaller facility containing only wind simulation equipment. It is assumed that only small-scale modifications would be required at the other university. Therefore, only effects associated with the FIU component are considered in this EA. If substantial modifications would be needed at an existing wave facility, additional NEPA review may be required.

## 2.2 No Action Alternative

Under the No Action Alternative, NSF would not authorize the use of NSF-awarded funds for the construction and operation of the PDT at FIU. At this time, it would be speculative to decide whether a lack of NSF funding would result in the PDT not being built or whether FIU would seek alternate sources of funding. This alternative would not fulfill the purpose of the Proposed Action or meet the need to test and prove a subset of eventual full-scale NICHE equipment, demonstrate the physics of full-scale NICHE conditions, and answer key scientific, technical, and operational questions relating to the feasibility of a full-scale NICHE as described in Section 1.2, *Purpose and Need*. For the analysis in Section 3, *Affected Environment and Environmental Consequences*, NSF assumes that under the No Action Alternative, the PDT would not be constructed.

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# 3. Affected Environment and Environmental Consequences

This section provides an overview of the existing environmental conditions at the proposed project site (the affected environment) and identifies the anticipated effects of the Proposed Action on each resource (environmental consequences). The analysis of resource impacts focuses on environmental issues proportionate to the degree of potential impact within the region of influence (ROI) or the area in which project-related impacts could occur for each resource. This EA also considers the potential direct, indirect, and cumulative impacts associated with the Proposed Action and No Action Alternative and identifies mitigation measures or best management practices (BMPs) that would be implemented to avoid or minimize potential impacts, if relevant. Direct impacts are those that would occur as a direct result of the Proposed Action. Indirect impacts are those that are caused by the Proposed Action but would occur later in time and/or farther away in distance. Cumulative impacts consider the incremental impact of the Proposed Project in combination with past, present, and reasonably foreseeable future projects. For this assessment, reasonably foreseeable future actions include the following:

- Expansion of the Engineering Center Building in accordance with FIU's master plan for the site (FIU, 2022).

The environmental effects of the No Action Alternative were also evaluated based on a comparison to the baseline conditions presented in this section.

## 3.1 Evaluated Resources

The following resources were identified as potentially affected by the Proposed Action and require evaluation in this EA:

- Noise (refer to Section 3.2)
- Water Resources (refer to Section 3.3)

In accordance with CEQ's directives to focus NEPA analyses on environmental resource areas in which there is the potential for significant impact and where the analyses are expected to provide useful information to the decision maker (40 C.F.R. §1502.2), some resource areas were eliminated from detailed study in this EA. The rationale for their elimination is summarized as follows:

- **Air Quality and Greenhouse Gases**: The Clean Air Act of 1970 (CAA) requires the U.S. Environmental Protection Agency (EPA) to identify National Ambient Air Quality Standards (NAAQS) necessary to protect the public health and welfare. The Proposed Action may involve short-term greenhouse gas (GHG) emissions associated with construction; however, the Proposed Action is in Miami-Dade County, which is in full attainment for all NAAQS criteria pollutants (EPA, 2022). Therefore, the CAA conformity analysis is not required and there is limited likelihood for the Proposed Action to cause a violation in CAA NAAQS.
- **Climate Change:** Executive Order (EO) 13990, "Protecting Public Health and Environment and Restoring Science to Tackle the Climate Crisis," and EO 14008, "Tackling the Climate Crisis at Home and Abroad," requires federal agencies to consider the impacts of climate change on their actions. The potential GHG emissions under the operation of the PDT are expected to be similar to the WOW's current conditions. Power for the operation of equipment at the PDT would be supplied by FPL and there would be no generators or other diesel-powered equipment; however, there may be short-term

GHG emissions and use of generators or other diesel-powered equipment during construction. Some of the energy needs would be offset by the solar canopy described in the following Utilities section. Additionally, the research from the PDT would add to the research on the effects of climate change and may improve climate resiliency.

- **Utilities:** The PDT would tie into FIU's existing utility systems for electric power, including renewable energy; water; sewage treatment; and stormwater management. The stormwater management system consists of exfiltration trenches, onsite dry retention areas, drainage swales, overland flow, and positive drainage pipe system. Construction and operation of the PDT is not expected to impact the capacity of the local major service providers (FPL or MDWASD). Additionally, some of the energy for the engineering campus is supplied by a solar canopy over the 400-space parking area west of the WOW, which provides 14 megawatts of power (Microgrid Knowledge, 2021).
- **Children's Environmental Health and Safety Risk:** EO 13045, "Protection of Children from Environmental Health Risks and Safety Risks," directs federal agencies to identify and assess environmental health risks and safety risks that may disproportionately affect children. Children may be located in neighboring multi-family housing, but these children would not be allowed access to the facility. Therefore, the Proposed Action would not disproportionately affect children.
- **Environmental Justice (EJ):** EO 12898, "Federal Actions to Address Environmental Justice in Minority and Low-income Populations," requires federal agencies to consider disproportionate risk to minority and low-income communities. Additionally, EO 14008, "Tackling the Climate Crisis at Home and Abroad," directs agencies to consider disproportionate impacts on minority and low-income populations from climate change. Based on a search within a 5-mile buffer area surrounding FIU Engineering Center, the EPA EJSCREEN (Appendix B) indicated that the percentage of minority and low-income populations are higher than the state average. However, there are no potential significant effects from the proposed action; therefore, there are no potential disproportionate effects to minority and low-income populations. Furthermore, the experiments performed at the proposed PDT may help improve climate resiliency for all populations.
- **Biological Resources**: A site visit conducted on April 5, 2022, confirmed that the property on which the PDT would be located consists of a previously developed area, with minimal to no vegetation and no suitable wildlife habitat. A list of threatened and endangered species that may occur in, or be affected by, the Proposed Action was obtained by the U.S. Fish and Wildlife Service (USFWS) and is provided in Appendix A. Due to the disturbed/maintained nature of the site, there is no suitable habitat for listed plant species. Upon review of the terrestrial wildlife species, it was confirmed that there is no potential for the Proposed Action to affect these species due to the lack of suitable habitat (refer to Table 3-1).
- **Land Use:** Land use will not change with the construction or operation of the PDT and is consistent with the land use map, designations, policies, and procedures that the FIU master plan established at the project site. The FIU master plan is currently going through a revision and would incorporate the PDT (FIU, 2022).
- **Hazardous Materials and Solid Waste:** The PDT would be located within an existing brownfield area, as designated by the Florida Department of Environmental Protection. However, there are no active contamination sites at a higher elevation and within 0.5 mile of the Proposed Action from which contamination could potentially migrate to the area of Proposed Action through groundwater flow (Appendix C). Solid waste generated by the proposed facility is anticipated to be general waste similar to existing building facilities on campus and can be handled under the FIU's current waste disposal contract.

- **Socioeconomics:** The construction and operation of the PDT would have a beneficial effect, as local construction workers would be employed, and once operational, a few new hires, including a site operation manager and a post-doctoral faculty position, are expected for the PDT. These additional personnel would be minimal compared to the population of the region.
- **Visual Resources:** No sensitive viewsheds are located in the vicinity of FIU's Engineering Center. The changes in the visual environment at the Engineering Center at FIU would be minimal because the project would be constructed adjacent to the existing NHERI WOW and in a manner that is consistent with existing development at the site. Standard BMPs would be used to minimize the potential for dust during construction activities, which could indirectly impact views, and revegetation at the site would minimize the potential for dust after the construction period. Vegetation along the north and eastern property boundary provides a visual screen between the PDT and the neighboring communities.
- **Geology and Soils:** The construction of the PDT would require grading and excavation to level the building site, install the foundation, and accommodate required stormwater management. Because this involves a relatively small area, and because erosion control measures would keep water and sediments from moving offsite and impacting other areas, there are no identified impacts to geologic and soil resources.
- **Historic Architectural, Archaeological, and Cultural Resources:** There are no known cultural resources at the proposed PDT site, and the site is not located in an area of high potential for cultural resources. If buried cultural resources are identified during the construction process, construction activities will cease, and the Florida State Historic Preservation Officer will be notified. On April 19, 2022, NSF sent a letter to the Florida State Historic Preservation Officer (SHPO) to initiate Section 106 and to seek concurrence on the finding of no effects on historic properties listed, or eligible for listing, on the National Register of Historic Places. On May 19, 2022, Florida SHPO concurred with the findings (no effect on historic properties) and subsequently requested a special condition regarding unexpected discoveries during ground-disturbing activities. This correspondence is in Appendix D. The Miccosukee Tribe of Indians of Florida were identified as a Tribe that had a historic range in this part of Florida (most others were further north and in the pan handle). The Miccosukee Tribe of Indians of Florida were contacted twice by phone and did not respond.
- **Human Health and Safety:** The construction of the PDT would involve routine construction and workers would comply with all applicable health and safety regulations. During operation, the PDT employees would follow a health and safety plan that includes health and safety training and the use of personal protective equipment. The Proposed Action does not involve any special health and safety concerns; therefore, there are no health and safety impacts.
- **Transportation:** A short-term increase in traffic would occur due to construction on the PDT, but the increase would not be noticeable compared to the surrounding traffic conditions. Operation of the PDT would accommodate an existing user base and, therefore, no effects to traffic and transportation are anticipated.

**Table 3-1. Habitat Requirements for Federally Listed Species**

| Type | Species-Status[a] | Habitat | Habitat present? |
|---|---|---|---|
| Mammals | Florida Bonneted Bat (*Eumops floridanus*)-**E** | Roosting habitat includes forests and other areas with tall, mature trees or other areas with suitable roost structures (buildings or bridges); foraging habitat in urban and residential areas, includes access to drinking water (open fresh water or wetlands) and relatively open areas to hunt (small patches of natural or semi-natural environment) (USFWS, 2020) | No, there are no tall trees in the study area. Any urban foraging bats would be active in the evening/nighttime and would not be in the area when the fans are operating during the day. |
| Mammals | Florida Panther (*Felis concolor coryi*)-**E** | Habitat generalists that typically inhabit forests, wetlands, and grasslands. The most suitable habitat is in unfragmented blocks and large areas (USFWS, 2008) | No |
| Mammals | Puma/Mountain Lion (*Felis concolor*)-**SA/T** | Same as previous | No |
| Birds | Bachman's Warbler (*Vermivora bachmanii*)-**E** | Inhabit bottomland forests and swamps (USFWS, 2015) | No |
| Birds | Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*)-**E** | Inhabit shallow freshwater marshes and shallow grassy shorelines of lakes (USFWS, 2019) | No |
| Birds | Wood Stork (*Mycteria americana*)-**T** | Nest in mixed hardwood swamps, sloughs, mangroves, and cypress domes/strands and forage in a variety of wetlands (Florida FWCC, 2022c) | No |
| Reptiles | American Alligator (*Alligator mississippiensis*)-**SA/T**; American Crocodile (*Crocodylus acutus*)-**T** | Semi-aquatic species that inhabit freshwater rivers, swamps, marshes, and lakes | No |
| Reptiles | Eastern Indigo Snake (*Drymarchon corais couperi*)-**T** | Inhabit pine flatwoods, hardwood forests, moist hammocks and cypress swamps (Florida FWCC, 2022a) | No |
| Insects | Bartram's Hairstreak Butterfly (*Strymon acis bartrami*)-**E**; Florida Leafwing Butterfly (*Anaea troglodyte floridalis*)-**E**; Miami Blue Butterfly (*Cyclargus thomasi bethunebakeri*)-**E** | Inhabit pine rockland habitat that is comprised of exposed limestone and hardwood hammocks (Florida FWCC, 2022b); Miami blue butterfly may also inhabit beachside scrub habitat (National Park Service, 2022) | No |

[a] Status indicated as "E" for Endangered; "T" for Threatened; "SA/T" for Similarity of Appearance (Threatened)

# 3.2 Noise

The ROI for noise is the PDT footprint and the surrounding communities that could be affected by noise during construction and operation of the PDT.

## 3.2.1 Affected Environment

Noise, often defined as unwanted sound, is one of the most common environmental issues associated with human activities. Public annoyance is the most common impact associated with exposure to elevated noise.

Sound is created by acoustic energy, which produces pressure waves that travel through air and are sensed by the eardrum. Since the range of sound pressure ratios varies greatly over many orders of magnitude, a base-10 logarithmic scale is used to express sound levels in dimensionless units of decibels (dB). Sound travels in waves and varying frequencies are associated with each sound event. The human ear does not respond equally to all frequencies. To obtain accurate measurements and descriptions of noise, given that noise is composed of many frequencies, the noise frequencies are filtered or weighted to most closely approximate the average frequency response of the human ear. This weighting is called the "A" scale on sound-level meters; this is the scale that is used for noise analyses. Decibel units described in this manner are referred to as A-weighted decibels, or dBA. Because sound intensity tends to fluctuate with time, a method is required to describe a noise source, such as a highway or airport, in a steady state condition.

Table 3-2 lists the relative A-weighted sound levels of common sounds measured in the environment and in industry for various noise sources.

**Table 3-2. Typical Sound Levels Measured in the Environment and Industry**

| Noise Source at a Given Distance | A-Weighted Sound Level in Decibels (dBA) |
|---|---|
| Rock band | 110 |
| Jet flyover at 1,000 feet | 105 |
| Gas lawnmower at 3 feet | 95 |
| Garbage disposal at 3 feet | 80 |
| Vacuum cleaner at 10 feet | 70 |
| Heavy traffic at 300 feet | 60 |
| Quiet urban daytime | 50 |
| Quiet urban nighttime | 40 |
| Library | 30 |
| Quiet rural nighttime | 25 |
| Recording studio | 15 |

Source: California Department of Transportation, 2013.

Noise-sensitive land uses generally are defined as locations where people reside or where the presence of unwanted sound could adversely affect the designated use of the land. Typically, noise-sensitive land uses include residential areas, hospitals, places of worship, libraries, and schools as well as nature and wildlife preserves and parks.

The existing noise environment in the ROI primarily consists of occasional aircraft flying overhead, operations from the WOW and noise from traffic on the local roadways, which is a mix of automobiles and medium and heavy trucks. Noise-sensitive locations in the ROI include the multi-family residential area to the northeast of the proposed PDT site (refer to Figure 3-1). This residential area has a background noise level of around 50 dBA, corresponding to the sound level of quiet urban daytime (Table 3-2). A daytime noise measurement taken during the April 5, 2022 site visit confirmed this assessment (Noise Measurement Location 1, Figure 3-1). The Noise Control Act of 1972, as amended (42 U.S.C. §§ 4901 *et seq*.), requires facilities to maintain noise levels that do not jeopardize the health and safety of the public, and this requirement applies to construction noise. The Miami-Dade Noise Ordinance (Miami-Dade County, 2022) regulates noise in the county.


**Figure 3-1. Proposed Physical Design Testbed at the FIU Campus**

### 3.2.2 Environmental Consequences

This section identifies the potential direct, indirect, and cumulative impact from noise that could result from the implementation of the Proposed Action or No Action Alternative. The impact thresholds related to noise are presented in Table 3-3.

**Table 3-3. Impact Thresholds for Noise**

| Impact | Description |
|---|---|
| Negligible | The alternative would result in a non-perceptible noise increase. |
| Minor | The alternative would result in a barely perceptible noise increase. |
| Moderate | The alternative would result in a readily perceptible noise increase but generally would not affect daily activities and would not result in hearing damage. |
| Major | The alternative would result in a disruptive noise increase, which would significantly affect daily activities and may result in hearing damage. |
| Quality: | Beneficial – would have a positive effect<br>Negative – would have an adverse effect |
| Duration: | Short-term – occurs only during the construction period<br>Long-term – continues after the construction period |

Equipment associated with the construction of the PDT would generate noise. Table 3-4 outlines the predicted noise level at 50 feet (dBA) for typical pieces of construction equipment that could be used for the construction of the PDT. Typical noise levels from these types of equipment have been measured and published in the Roadway Construction Noise Model prepared by the Federal Highway Administration in the Roadway Construction Noise Model User's Guide (FHWA, 2006). Noise for any specific receptor would be dominated by the closest and loudest equipment.

**Table 3-4. Predicted Noise Levels for Construction Equipment**

| Construction Equipment | Predicted Noise Level at 50 feet (dBA) |
|---|---|
| Dump Truck | 76 |
| Paver | 77 |
| Backhoe | 78 |
| Concrete Mixer Truck | 78 |
| Roller | 80 |
| Crane | 81 |
| Dozer | 82 |
| Jackhammer | 89 |

Source: FHWA, 2006.

To estimate the potential noise impacts from the construction of the PDT, three representative construction equipment operating simultaneously were modeled: a jackhammer, a dozer, and a dump truck. Table 3-5 provides construction equipment noise levels at various distances using the Roadway Construction Noise Model. These estimated noise levels are conservative because the only sound-

buffering mechanism considered was distance from the source. Additional buffering that would be provided by vegetation, structures, atmospheric absorption, and terrain features was not considered in the evaluation.

**Table 3-5. Representative Equipment Noise Levels Versus Distance**

| Distance from Sensitive Receptor (feet) | Equivalent Noise Level (dBA) |
|---|---|
| 50 | 84 |
| 100 | 78 |
| 200 | 72 |
| 400 | 66 |
| 800 | 60 |
| 1,600 | 54 |
| 3,200 | 48 |

The main source of noise during the construction of the PDT would be the noise from construction equipment. As shown on Figure 3-1, the nearest noise receptor is approximately 100 feet from the proposed PDT location. Based on Table 3-5, the noise level at that location would be approximately 78 dBA., and as shown in Table 3-2, this level of noise is less than the noise produced by a gas lawnmower at 3 feet (95 dB). The construction of the PDT would result in readily perceptible noise increase; however, the construction would take place between the hours of 7 am and 8 pm, in accordance with the local noise ordinance, so it would generally not affect daily activities and would not result in hearing damage. The construction of the PDT would have a **moderate, negative,** and **short-term** noise impact on the neighboring community.

The main source of noise during operation of the PDT would be the fan system. The noise of the PDT would be similar to the noise during operation of the existing WOW facility. During the April 5, 2022 site visit, approximately 85 dB were measured downwind and just north of the WOW during operation of the fans (Noise Measurement Location 2, Figure 3-1). As shown in Table 3-2, this level of noise is less than the noise produced by a gas lawnmower at 3 feet (95 dB). During typical operation of the WOW, the fans are turned on for less than 15-minute increments during a 4-hour-period-per-day time span, either 8 a.m. to 12 p.m. or 12 p.m. to 4 p.m., depending on the time of the year.

Although the PDT would be closer to the residential neighborhood, it would produce similar, if not less, noise than the WOW and would operate under similar time periods. The PDT fans would also not be turned on at the same time as the WOW fans. The proposed fan technologies, which would reduce noise emissions, may be found in Appendix E. The PDT may result in a readily perceptible noise increase, but this increase generally would not affect daily activities and would not result in hearing damage. The operation of the PDT would have a **moderate, negative,** and **long-term** noise impact on the neighboring community.

There would be **no cumulative impacts** from noise when considering the proposed future activities near the site, due the quiet nature of operations the Engineering Center Building, and there would be no anticipated cumulative impact from construction.

There would be **no effect** from noise under the No Action Alternative.

# 3.3 Water Resources

Water resources include surface water and groundwater. The ROI for water resources is the C-4 Canal watershed.

## 3.3.1 Affected Environment

The Proposed Action is located in the C-4 Canal watershed. The C-4 canal is located approximately 0.5 mile south of the site and drains east (approximately 11 miles) to Biscayne Bay (USGS, 2016).

The Proposed Action is located within Zone AH according to Federal Emergency Management Agency (FEMA) flood insurance rate map 12086C0288L (FEMA, 2009). EO11988, "Floodplain Management," directs federal agencies to take action to reduce the risk of flood loss; minimize the impacts of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains. Compliance with EO11988 is documented in Appendix F, Floodplain Management Compliance.

No wetlands are located in the project area according to the USFWS's National Wetlands Inventory (USFWS, 2022). This fact was confirmed during the April 5, 2022 site visit.

The groundwater system within the ROI consists of a shallow surficial aquifer system that includes the following aquifers with increasing depth: the Biscayne aquifer, gray limestone aquifer, and the confined Floridan aquifer system. These aquifers are separated by beds of sand, silt, and clay that restricted vertical movement of groundwater between the aquifers. The water table may often be found within a few feet of the ground surface in the Biscayne aquifer (USGS, 2016). The Safe Drinking Water Act (Public Law 93-523) requires protection of sole source aquifers such as the Biscayne aquifer.

## 3.3.2 Environmental Consequences

This section identifies the potential direct, indirect, and cumulative impacts to water resources that could result from implementation of the Proposed Action and No Action Alternative. The impact thresholds related to water resources are presented in Table 3-6.

**Table 3-6. Impact Thresholds for Water Resources**

| Impact | Description |
|---|---|
| Negligible | The alternative would either not affect water quality, or the change in water quality would be below or at the level of detection. |
| Minor | The alternative would result in a detectable change in water quality, but the impact would be small, localized, and of minimal consequence. |
| Moderate | The alternative would result in a measurable and consequential change in water quality. |
| Major | The alternative would result in a substantial change in water quality. |
| Quality: | Beneficial – would have a positive effect<br>Negative – would have an adverse effect |
| Duration: | Short-term – occurs only during the construction period<br>Long-term – continues after the construction period |

The construction of the PDT would result in an increase of impervious area of up to 8,500 square feet and require fill to meet minimum base flood elevations. The design of the facility would include stormwater retention and treatment to offset the increase in stormwater runoff from the increase in impervious area under the Environmental Resource Permitting process in accordance with the water quality requirements of the South Florida Water Management District (Chapter 62-330 Florida Administrative Code) and Miami Dade County Division of Environmental Resources Management. The stormwater system would also require compensation for loss in floodplain stormwater storage volume due to the fill. During construction of the PDT, the sediment and erosion control BMPs may include the use of silt fencing, sediment ponds, vehicle tracking controls, good housekeeping, inspection and maintenance schedules, and training. The impact to surface water during the construction and operation of the PDT would be **negligible**.

The PDT would not require the construction of any water wells because water would be supplied by MDWASD. During construction, temporary dewatering could be required, and a Miami Dade County Class 5 Dewatering Permit would be obtained, if necessary (Miami Dade County, 2021). The impact to groundwater would be **minor** during construction and operation of the Proposed Action.

There would be **no cumulative impacts** to water resources when considering the ongoing activities of the expansion of the Engineering Center Building, because the water, sewer, and stormwater systems would be upgraded to accommodate the building expansion.

There would be **no effects** to water resources under the No Action Alternative.

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# 4. Coordination with Other Agencies, Regulatory Processes, Public Involvement and Notifications

## 4.1 National Environmental Policy Act Public Review

In preparing this EA, NSF consulted with the SHPO regarding historic properties, obtained a federally listed species from USFWS, and performed a Coastal Zone Management Act (CZMA) consistency determination.

Pursuant to NEPA requirements for the public to be involved in federal agency decision making, hard copies of the EA were distributed to the following libraries and digitally available on NSF's website www.nsf.gov/eng/infrastructure/environmental-assessment for a 30-day public review and comment period.

1. Steve and Dorothea Green Library, 11200 SW 8th Street, Miami, FL 33199
2. Fairlawn Branch Library, 6376 SW 8th Street, Miami, FL 33144
3. International Mall Branch Library, 10315 NW 12 Street, Doral, FL 33172

## 4.2 National Historic Preservation Act Section 106 Consultation

Section 106 of the NHPA, as amended, requires federal agencies to consider the effects of their projects on significant historic properties and to consult with the SHPO and consulting parties on any such effects. The implementing regulations for NHPA (36 C.F.R. Part 800) define historic properties as any prehistoric or historic district, site, building, structure, or object that is included in, or eligible for inclusion in, the National Register of Historic Places. As described in Section 3, the Proposed Action would have no effect on historic properties. If, during the comment period for this EA, NSF learns of any new information regarding potential historic properties, NSF will reopen consultation with the SHPO under Section 106 as appropriate. Refer to Appendix D for Florida SHPO correspondence.

## 4.3 Endangered Species Act Consultation

The ESA requires federal agencies to ensure their actions do not jeopardize the continued existence of any federally listed endangered or threatened species or adversely modify any critical habitat of such species. Critical habitat is defined as a specific geographic area that contains features for the conservation of an endangered species and may require special management and protection. Federal agencies must consult with USFWS under Section 7 of the ESA regarding any action that may affect a listed species. As described in Section 3, the Proposed Action does not affect any listed species or critical habitat. Therefore, Section 7 consultation is not required.

## 4.4 Coastal Zone Management Act

The CZMA establishes a national policy to preserve, protect, develop, restore, and enhance the resources of the nation's coastal zone. Federal agencies are responsible for making consistency determinations within coastal zone areas. The Proposed Action is located within Florida's coastal zone area. However, the Proposed Action would have no effect on coastal zone resources in Florida and would be consistent with

the Florida Coastal Management Program. NSF submitted this determination to the Florida Department of Environmental Protection's Florida State Clearinghouse for review by relevant State agencies. Should any additional impacts or concerns be identified, NSF will conduct additional evaluation as appropriate. NSF's determination can be found in Appendix G, CZMA Documents.

# 5. References

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# 6. List of Preparers

The primary persons responsible for contributing to, preparing, and reviewing this report are listed in Table 6-1.

**Table 6-1. List of Preparers**

| Name | Role | Education | Years of Experience |
|---|---|---|---|
| Michelle Rau, PMP | Program Manager | M.S., Business Administration<br>B.S., Ecology and Evolutionary Biology | 25 |
| Madeline Almodovar | Project Manager | Master of Business Administration<br>B.S., Industrial Biotechnology | 16 |
| Christina McDonough, P.E. | NEPA Lead | M.E., Environmental Engineering<br>B.S.C.E., Civil Engineering | 29 |
| Emily Gulick, CEP-IT | Environmental Planner | B.A., Environmental Studies<br>B.A., Geography | 5 |
| Keara Amble | NEPA Support | B.S., Environmental Management and Protection | 2 |
| Karen Sanders | Technical Editor | J.D., Law<br>B.A., Anthropology | 25 |

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# Appendix A
# USFWS Species List

Section 508 Accessibility Note: If you need additional assistance, please email us at engineering@nsf.gov.

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# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Florida Ecological Services Field Office
FL

In Reply Refer To: May 13, 2022
Project Code: 2022-0042519
Project Name: Proposed Funding of Testing Infrastructure for Community Hardening in Extreme Event

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may

affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

**Migratory Birds**: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Florida Ecological Services Field Office**
, FL

# Project Summary

Project Code: 2022-0042519
Event Code: None
Project Name: Proposed Funding of Testing Infrastructure for Community Hardening in Extreme Event
Project Type: New Constr - Above Ground
Project Description: NSF is considering a proposal from Florida International University (FIU) to construct a building to house wind and wave surge test instruments. The building would be approximately 8,500 square feet (170'x50') and in the located northeast corner of the FIU Engineering Campus.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@25.7714747,-80.36615486704804,14z


Counties: Miami-Dade County, Florida

## Endangered Species Act Species

There is a total of 35 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

| NAME | STATUS |
|---|---|
| Florida Bonneted Bat *Eumops floridanus*<br>There is **proposed** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/8630 | Endangered |
| Florida Panther *Puma (=Felis) concolor coryi*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/1763 | Endangered |
| Puma (=mountain Lion) *Puma (=Felis) concolor (all subsp. except coryi)*<br>Population: FL<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/6049 | Similarity of Appearance (Threatened) |

## Birds

| NAME | STATUS |
|---|---|
| Bachman's Warbler (=wood) *Vermivora bachmanii*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/3232 | Endangered |
| Everglade Snail Kite *Rostrhamus sociabilis plumbeus*<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/7713 | Endangered |
| Wood Stork *Mycteria americana*<br>Population: AL, FL, GA, MS, NC, SC<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/8477<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/4EQ4MVR56VCFDIJPB65ALPQ2NI/documents/generated/6954.pdf | Threatened |

## Reptiles

| NAME | STATUS |
|---|---|
| American Alligator *Alligator mississippiensis*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/776 | Similarity of Appearance (Threatened) |
| American Crocodile *Crocodylus acutus*<br>Population: U.S.A. (FL)<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/6604 | Threatened |
| Eastern Indigo Snake *Drymarchon corais couperi*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/646 | Threatened |
| Hawksbill Sea Turtle *Eretmochelys imbricata*<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/3656 | Endangered |
| Leatherback Sea Turtle *Dermochelys coriacea*<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/1493 | Endangered |
| Loggerhead Sea Turtle *Caretta caretta*<br>Population: Northwest Atlantic Ocean DPS<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/1110 | Threatened |

## Fishes

| NAME | STATUS |
|---|---|
| Gulf Sturgeon *Acipenser oxyrinchus (=oxyrhynchus) desotoi* | Threatened |
| There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/651 | |

## Insects

| NAME | STATUS |
|---|---|
| Bartram's Hairstreak Butterfly *Strymon acis bartrami* | Endangered |
| There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4837 | |
| Florida Leafwing Butterfly *Anaea troglodyta floridalis* | Endangered |
| There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6652 | |
| Miami Blue Butterfly *Cyclargus (=Hemiargus) thomasi bethunebakeri* | Endangered |
| No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3797 | |
| Monarch Butterfly *Danaus plexippus* | Candidate |
| No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743 | |

## Flowering Plants

| NAME | STATUS |
|---|---|
| Beach Jacquemontia *Jacquemontia reclinata*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/1277 | Endangered |
| Blodgett's Silverbush *Argythamnia blodgettii*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/6823 | Threatened |
| Cape Sable Thoroughwort *Chromolaena frustrata*<br>Population:<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/4733 | Endangered |
| Carter's Mustard *Warea carteri*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/5583 | Endangered |
| Carter's Small-flowered Flax *Linum carteri carteri*<br>Population:<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/7208 | Endangered |
| Crenulate Lead-plant *Amorpha crenulata*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/6470 | Endangered |
| Deltoid Spurge *Chamaesyce deltoidea ssp. deltoidea*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/199 | Endangered |
| Everglades Bully *Sideroxylon reclinatum ssp. austrofloridense*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/4735 | Threatened |
| Florida Brickell-bush *Brickellia mosieri*<br>Population:<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/956 | Endangered |
| Florida Pineland Crabgrass *Digitaria pauciflora*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/3728 | Threatened |
| Florida Prairie-clover *Dalea carthagenensis floridana* | Endangered |

| NAME | STATUS |
|---|---|
| Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/2300 | |
| Florida Semaphore Cactus *Consolea corallicola*<br>Population:<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/4356 | Endangered |
| Garber's Spurge *Chamaesyce garberi*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/8229 | Threatened |
| Pineland Sandmat *Chamaesyce deltoidea pinetorum*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/1914 | Threatened |
| Sand Flax *Linum arenicola*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/4313 | Endangered |
| Small's Milkpea *Galactia smallii*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/3360 | Endangered |
| Tiny Polygala *Polygala smallii*<br>Population:<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/996 | Endangered |

## Ferns and Allies

| NAME | STATUS |
|---|---|
| Florida Bristle Fern *Trichomanes punctatum ssp. floridanum*<br>Population:<br>There is **proposed** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/8739 | Endangered |

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

# USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

# Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

**The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location.** To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

| NAME | BREEDING SEASON |
|---|---|
| American Kestrel *Falco sparverius paulus*<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br>https://ecos.fws.gov/ecp/species/9587 | Breeds Apr 1 to Aug 31 |
| Great Blue Heron *Ardea herodias occidentalis*<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA | Breeds Jan 1 to Dec 31 |
| Lesser Yellowlegs *Tringa flavipes*<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9679 | Breeds elsewhere |

| NAME | BREEDING SEASON |
|---|---|
| Mangrove Cuckoo *Coccyzus minor*<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA | Breeds Apr 20 to Aug 20 |
| Prairie Warbler *Dendroica discolor*<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds May 1 to Jul 31 |
| Swallow-tailed Kite *Elanoides forficatus*<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/8938 | Breeds Mar 10 to Jun 30 |
| White-crowned Pigeon *Patagioenas leucocephala*<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/4047 | Breeds May 1 to Sep 30 |

## Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

**Probability of Presence (■)**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

**Breeding Season (■)**
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort (|)**
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

**No Data (–)**
A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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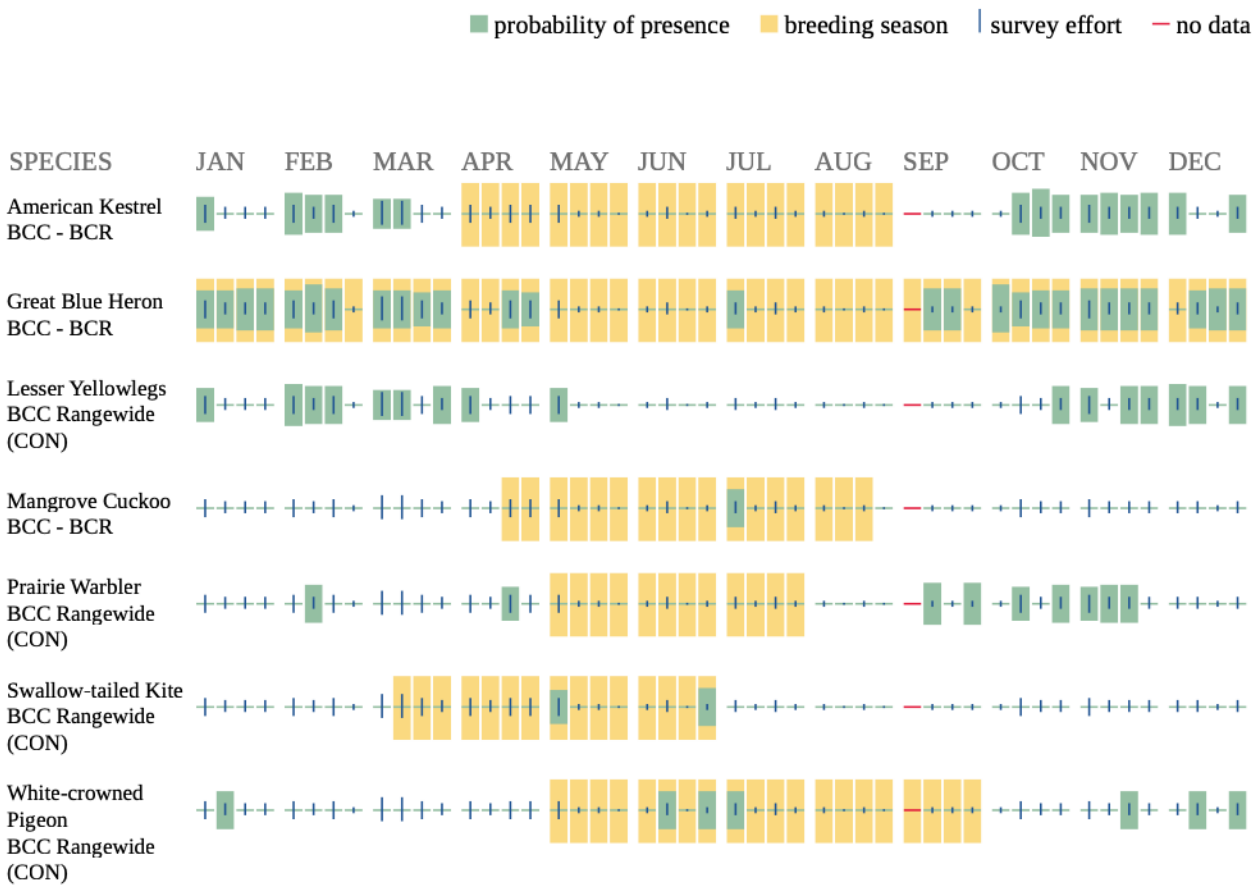

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

## Migratory Birds FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and

how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

**Details about birds that are potentially affected by offshore projects**
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

**What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

**Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

## IPaC User Contact Information


| | |
|---|---|
| Agency: | National Science Foundation |
| Name: | Kristen Hamilton |
| Address: | 2415 Eisenhower Avenue |
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# Appendix B
# EPA EJScreen

Section 508 Accessibility Note: If you need additional assistance, please email us at engineering@nsf.gov.

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# EJScreen Report (Version 2.0)

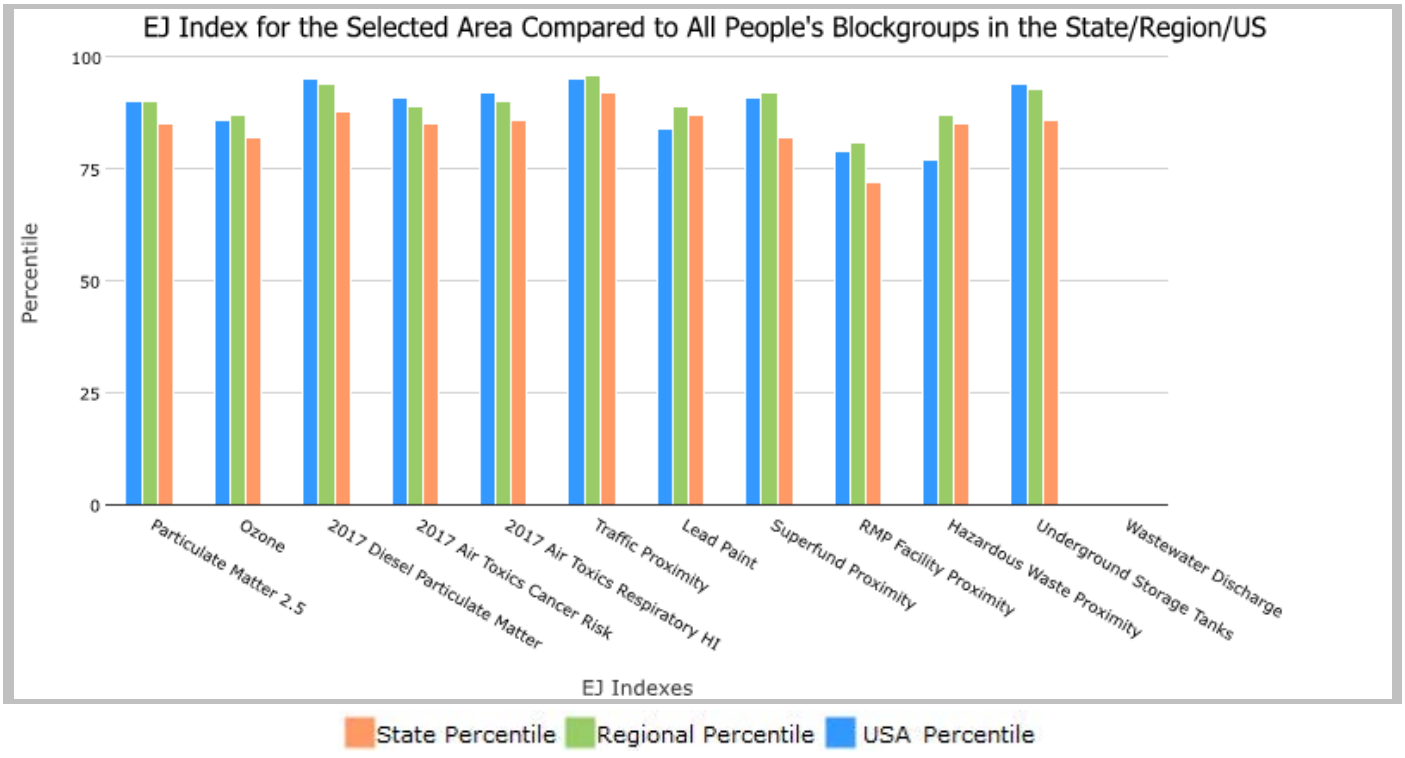
**5 miles Ring Centered at 25.770011,-80.367742, FLORIDA, EPA Region 4**

**Approximate Population: 392,929**

**Input Area (sq. miles): 78.53**

**FIU Engineering Center (The study area contains 1 blockgroup(s) with zero population.)**

| Selected Variables | State Percentile | EPA Region Percentile | USA Percentile |
|---|---|---|---|
| **Environmental Justice Indexes** | | | |
| EJ Index for Particulate Matter 2.5 | 85 | 90 | 90 |
| EJ Index for Ozone | 82 | 87 | 86 |
| EJ Index for 2017 Diesel Particulate Matter* | 88 | 94 | 95 |
| EJ Index for 2017 Air Toxics Cancer Risk* | 85 | 89 | 91 |
| EJ Index for 2017 Air Toxics Respiratory HI* | 86 | 90 | 92 |
| EJ Index for Traffic Proximity | 92 | 96 | 95 |
| EJ Index for Lead Paint | 87 | 89 | 84 |
| EJ Index for Superfund Proximity | 82 | 92 | 91 |
| EJ Index for RMP Facility Proximity | 72 | 81 | 79 |
| EJ Index for Hazardous Waste Proximity | 85 | 87 | 77 |
| EJ Index for Underground Storage Tanks | 86 | 93 | 94 |
| EJ Index for Wastewater Discharge | N/A | N/A | N/A |




This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

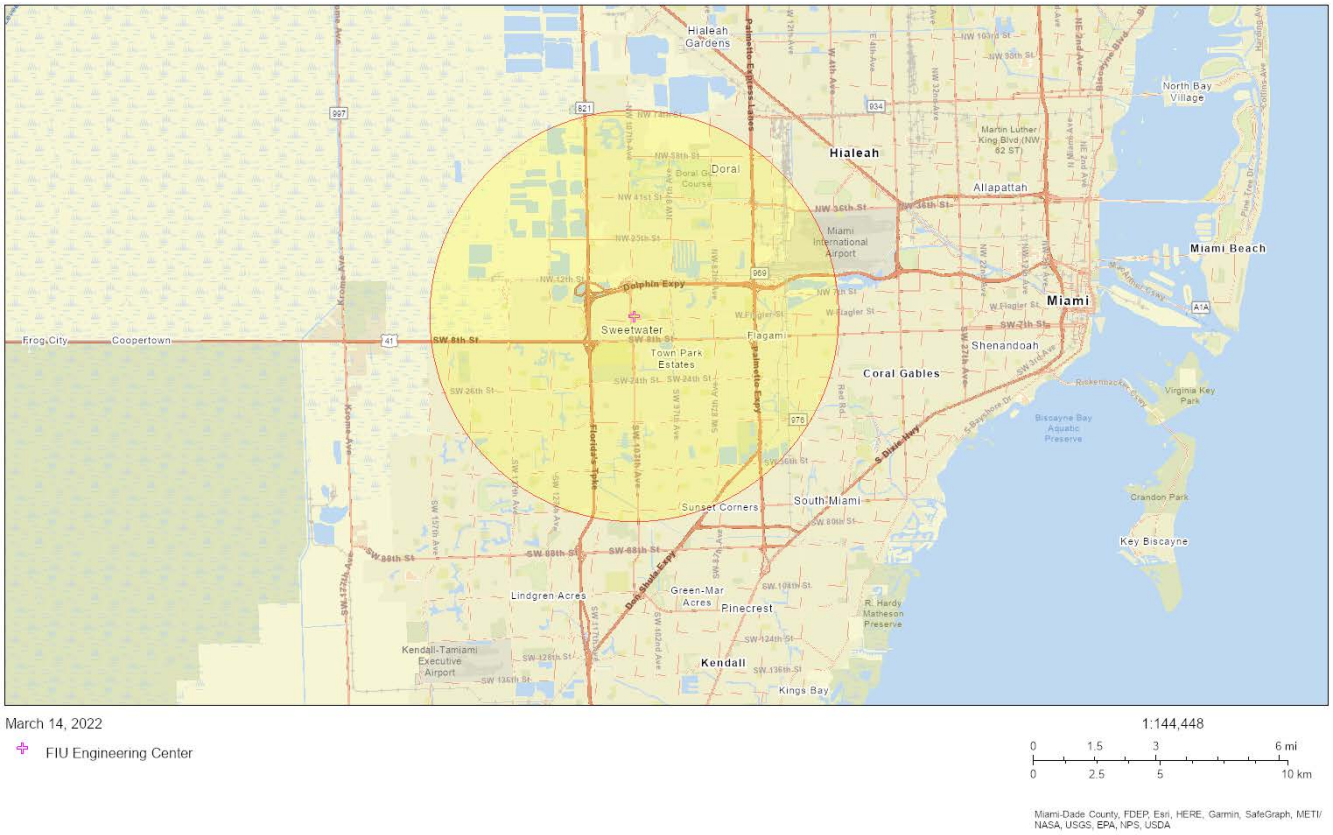
# EJScreen Report (Version 2.0)

**5 miles Ring Centered at 25.770011,-80.367742, FLORIDA, EPA Region 4**

**Approximate Population: 392,929**

**Input Area (sq. miles): 78.53**

**FIU Engineering Center (The study area contains 1 blockgroup(s) with zero population.)**




| Sites reporting to EPA | |
|---|---|
| Superfund NPL | 0 |
| Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF) | 2 |

# EJScreen Report (Version 2.0)

**5 miles Ring Centered at 25.770011,-80.367742, FLORIDA, EPA Region 4**

**Approximate Population: 392,929**

**Input Area (sq. miles): 78.53**

**FIU Engineering Center (The study area contains 1 blockgroup(s) with zero population.)**

| Selected Variables | Value | State Avg. | %ile in State | EPA Region Avg. | %ile in EPA Region | USA Avg. | %ile in USA |
|---|---|---|---|---|---|---|---|
| **Pollution and Sources** | | | | | | | |
| Particulate Matter 2.5 ($\mu g/m^3$) | 8.23 | 7.64 | 90 | 8.18 | 53 | 8.74 | 39 |
| Ozone (ppb) | 30 | 32.7 | 13 | 37.9 | 4 | 42.6 | 2 |
| 2017 Diesel Particulate Matter* ($\mu g/m^3$) | 0.587 | 0.338 | 91 | 0.261 | 95-100th | 0.295 | 90-95th |
| 2017 Air Toxics Cancer Risk* (lifetime risk per million) | 30 | 28 | 96 | 31 | 80-90th | 29 | 80-90th |
| 2017 Air Toxics Respiratory HI* | 0.42 | 0.36 | 93 | 0.4 | 80-90th | 0.36 | 80-90th |
| Traffic Proximity (daily traffic count/distance to road) | 1500 | 630 | 90 | 430 | 94 | 710 | 88 |
| Lead Paint (% Pre-1960 Housing) | 0.17 | 0.11 | 77 | 0.15 | 70 | 0.28 | 49 |
| Superfund Proximity (site count/km distance) | 0.11 | 0.13 | 67 | 0.083 | 81 | 0.13 | 70 |
| RMP Facility Proximity (facility count/km distance) | 0.25 | 0.79 | 38 | 0.6 | 51 | 0.75 | 45 |
| Hazardous Waste Proximity (facility count/km distance) | 0.46 | 0.5 | 75 | 0.62 | 66 | 2.2 | 42 |
| Underground Storage Tanks (count/$km^2$) | 8.3 | 6.2 | 75 | 3.5 | 88 | 3.9 | 86 |
| Wastewater Discharge (toxicity-weighted concentration/m distance) | N/A | 1 | N/A | 0.45 | N/A | 12 | N/A |
| **Socioeconomic Indicators** | | | | | | | |
| Demographic Index | 64% | 40% | 83 | 37% | 86 | 36% | 85 |
| People of Color | 93% | 46% | 90 | 39% | 93 | 40% | 91 |
| Low Income | 36% | 34% | 58 | 35% | 55 | 31% | 64 |
| Unemployment Rate | 4% | 6% | 41 | 6% | 42 | 5% | 44 |
| Linguistically Isolated | 30% | 7% | 94 | 3% | 97 | 5% | 96 |
| Less Than High School Education | 18% | 12% | 78 | 13% | 75 | 12% | 77 |
| Under Age 5 | 5% | 5% | 49 | 6% | 44 | 6% | 42 |
| Over Age 64 | 19% | 20% | 60 | 17% | 67 | 16% | 69 |

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

For additional information, see: www.epa.gov/environmentaljustice

# EJSCREEN ACS Summary Report

Location: User-specified point center at 25.770011, -80.367742
Ring (buffer): 5-miles radius
Description: FIU Engineering Center

| Summary of ACS Estimates | 2015 - 2019 |
|---|---|
| Population | 392,929 |
| Population Density (per sq. mile) | 5,645 |
| People of Color Population | 364,727 |
| % People of Color Population | 93% |
| Households | 152,574 |
| Housing Units | 179,198 |
| Housing Units Built Before 1950 | 5,631 |
| Per Capita Income | 26,715 |
| Land Area (sq. miles) (Source: SF1) | 69.60 |
| % Land Area | 94% |
| Water Area (sq. miles) (Source: SF1) | 4.67 |
| % Water Area | 6% |

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Race** | | | |
| Total | 392,929 | 100% | 1,047 |
| Population Reporting One Race | 388,293 | 99% | 2,549 |
| White | 365,349 | 93% | 1,050 |
| Black | 9,497 | 2% | 570 |
| American Indian | 351 | 0% | 103 |
| Asian | 6,272 | 2% | 301 |
| Pacific Islander | 30 | 0% | 36 |
| Some Other Race | 6,794 | 2% | 489 |
| Population Reporting Two or More Races | 4,635 | 1% | 420 |
| Total Hispanic Population | 351,846 | 90% | 1,050 |
| Total Non-Hispanic Population | 41,082 | | |
| White Alone | 28,201 | 7% | 413 |
| Black Alone | 5,530 | 1% | 430 |
| American Indian Alone | 255 | 0% | 103 |
| Non-Hispanic Asian Alone | 5,857 | 1% | 301 |
| Pacific Islander Alone | 30 | 0% | 36 |
| Other Race Alone | 208 | 0% | 62 |
| Two or More Races Alone | 1,001 | 0% | 267 |
| **Population by Sex** | | | |
| Male | 188,636 | 48% | 960 |
| Female | 204,292 | 52% | 644 |
| **Population by Age** | | | |
| Age 0-4 | 19,466 | 5% | 261 |
| Age 0-17 | 67,707 | 17% | 504 |
| Age 18+ | 325,221 | 83% | 681 |
| Age 65+ | 73,120 | 19% | 277 |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019 .

# EJSCREEN ACS Summary Report

Location: User-specified point center at 25.770011, -80.367742
Ring (buffer): 5-miles radius
Description: FIU Engineering Center

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population 25+ by Educational Attainment** | | | |
| Total | 291,285 | 100% | 849 |
| Less than 9th Grade | 23,832 | 8% | 329 |
| 9th - 12th Grade, No Diploma | 29,675 | 10% | 585 |
| High School Graduate | 77,525 | 27% | 380 |
| Some College, No Degree | 40,329 | 14% | 399 |
| Associate Degree | 30,274 | 10% | 347 |
| Bachelor's Degree or more | 89,649 | 31% | 426 |
| **Population Age 5+ Years by Ability to Speak English** | | | |
| Total | 373,463 | 100% | 972 |
| Speak only English | 37,086 | 10% | 526 |
| Non-English at Home[1+2+3+4] | 336,376 | 90% | 871 |
| [1]Speak English "very well" | 175,064 | 47% | 750 |
| [2]Speak English "well" | 63,429 | 17% | 447 |
| [3]Speak English "not well" | 58,897 | 16% | 401 |
| [4]Speak English "not at all" | 38,986 | 10% | 681 |
| [3+4]Speak English "less than well" | 97,883 | 26% | 695 |
| [2+3+4]Speak English "less than very well" | 161,312 | 43% | 721 |
| **Linguistically Isolated Households*** | | | |
| Total | 39,666 | 100% | 231 |
| Speak Spanish | 39,073 | 99% | 213 |
| Speak Other Indo-European Languages | 304 | 1% | 88 |
| Speak Asian-Pacific Island Languages | 275 | 1% | 42 |
| Speak Other Languages | 14 | 0% | 19 |
| **Households by Household Income** | | | |
| Household Income Base | 152,574 | 100% | 249 |
| < $15,000 | 19,826 | 13% | 157 |
| $15,000 - $25,000 | 15,314 | 10% | 143 |
| $25,000 - $50,000 | 33,680 | 22% | 189 |
| $50,000 - $75,000 | 27,886 | 18% | 170 |
| $75,000 + | 55,867 | 37% | 335 |
| **Occupied Housing Units by Tenure** | | | |
| Total | 152,574 | 100% | 249 |
| Owner Occupied | 74,952 | 49% | 202 |
| Renter Occupied | 77,622 | 51% | 240 |
| **Employed Population Age 16+ Years** | | | |
| Total | 333,803 | 100% | 968 |
| In Labor Force | 204,126 | 61% | 768 |
| Civilian Unemployed in Labor Force | 7,573 | 2% | 199 |
| Not In Labor Force | 129,677 | 39% | 968 |

**Data Note:** Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)
*Households in which no one 14 and over speaks English "very well" or speaks English only.

# EJSCREEN ACS Summary Report

Location: User-specified point center at 25.770011, -80.367742
Ring (buffer): 5-miles radius
Description: FIU Engineering Center

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Language Spoken at Home*** | | | |
| Total (persons age 5 and above) | 377,660 | 100% | 968 |
| English | 38,803 | 10% | 711 |
| Spanish | 328,599 | 87% | 935 |
| French | 937 | 0% | 263 |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | 308 | 0% | 75 |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | 4,155 | 1% | 277 |
| Chinese | 1,617 | 0% | 203 |
| Japanese | N/A | N/A | N/A |
| Korean | 219 | 0% | 161 |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | 200 | 0% | 67 |
| Other Asian | 852 | 0% | 172 |
| Tagalog | 365 | 0% | 103 |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | 636 | 0% | 214 |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | 523 | 0% | 271 |
| Total Non-English | 338,857 | 90% | 1,201 |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic popultion can be of any race.
N/A meansnot available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.
*Population by Language Spoken at Home is available at the census tract summary level and up.

# Appendix C
# Environmental Data Resources Summary

Section 508 Accessibility Note: If you need additional assistance, please email us at engineering@nsf.gov.

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**FIU PDT**
10555 West Flagler Street
Miami, FL  33172

Inquiry Number: 6931685.2s
April 08, 2022

# EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.

# EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

## TARGET PROPERTY INFORMATION

### ADDRESS

10555 WEST FLAGLER STREET
MIAMI, FL 33172

### COORDINATES

| | |
|---|---|
| Latitude (North): | 25.7713890 - 25ˆ 46' 17.00'' |
| Longitude (West): | 80.3658330 - 80ˆ 21' 56.99'' |
| Universal Tranverse Mercator: | Zone 17 |
| UTM X (Meters): | 563590.2 |
| UTM Y (Meters): | 2850358.5 |
| Elevation: | 5 ft. above sea level |

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

| | |
|---|---|
| Target Property: | TP |
| Source: | U.S. Geological Survey |

| | |
|---|---|
| Target Property: | NW |
| Source: | U.S. Geological Survey |

### AERIAL PHOTOGRAPHY IN THIS REPORT

| | |
|---|---|
| Portions of Photo from: | 20151123 |
| Source: | USDA |

# MAPPED SITES SUMMARY

Target Property Address:
10555 WEST FLAGLER STREET
MIAMI, FL 33172

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| A1 | HEMISPHERIC CENTER F | 10555 W. FLAGLER STR | RCRA-VSQG, PADS, FINDS | | TP |
| A2 | HEMISPHERIC CENTER F | 10555 W. FLAGLER STR | FTTS, HIST FTTS | | TP |
| A3 | FIU - ENGINEERING CE | 10555 W FLAGLER ST | ASBESTOS, TIER 2 | | TP |
| A4 | FLORIDA INTL UNIVERS | 10555 W FLAGLER ST | UST, AST, FINDS, ECHO, Miami-Dade Co. GTO,... | | TP |
| A5 | FLORIDA INTERNATIONA | 10555 WEST FLAGLER S | TIER 2 | | TP |
| A6 | FIU SOLAR | 10555 WEST FLAGLER S | FINDS | | TP |
| Reg | SWEETWATER E | | BROWNFIELDS | Same | 1 ft. |
| 7 | FIU ENGINEERING CENT | 10575 W FLAGLER ST | SWF/LF | Lower | 1024, 0.194, SSW |
| B8 | SUNSHINE #54 | 10450 W FLAGLER ST | LUST, UST, Miami-Dade IW, DWM CONTAM, Enforcement,... | Lower | 1102, 0.209, South |
| B9 | AMOCO SERVICE STATIO | 10450 W FLAGLER ST | Miami-Dade Co. SPILL, RCRA NonGen / NLR | Lower | 1102, 0.209, South |
| B10 | CLINICA DENTAL SWEET | 10500 W FLAGLER ST | Miami-Dade IW | Lower | 1112, 0.211, South |
| C11 | CEFERINO PADILLA, M. | 10404 W FLAGLER ST ( | Miami-Dade IW | Lower | 1117, 0.212, South |
| C12 | LEAN KITCHEN CORP. | 10404 W FLAGLER ST ( | CLEANUP SITES, Miami-Dade Co. GTO, DWM CONTAM,... | Lower | 1117, 0.212, South |
| C13 | TROPIC CLEANERS | 10404 W FLAGLER ST | PRIORITYCLEANERS, RCRA NonGen / NLR, Miami-Dade... | Lower | 1117, 0.212, South |
| C14 | MIAMI CARBAR TROPIC | 10404 W FLAGLER ST ( | Miami-Dade IW | Lower | 1117, 0.212, South |
| C15 | ROLANDO SOMARRIBA, D | 10404 W FLAGLER ST ( | Miami-Dade IW | Lower | 1117, 0.212, South |
| C16 | DR. HUGO SALGADO-LOV | 10404 W FLAGLER ST ( | Miami-Dade IW | Lower | 1117, 0.212, South |
| D17 | GEORGES CLEANERS | 10362 W FLAGLER ST | RCRA NonGen / NLR, FINDS, ECHO, Miami-Dade Co. AP,... | Lower | 1118, 0.212, SSE |
| D18 | RAINBOW GROOMING & L | 10360 W FLAGLER ST | Miami-Dade IW | Lower | 1120, 0.212, SSE |
| D19 | UBA EXPRESS CARGO | 10350 W FLAGLER ST | Miami-Dade IW | Lower | 1131, 0.214, SSE |
| D20 | MELISSA MEDICAL CENT | 10346 W FLAGLER ST | Miami-Dade IW | Lower | 1136, 0.215, SSE |
| D21 | CLARKE MEDICAL SERVI | 10344-46 W FLAGLER S | Miami-Dade IW | Lower | 1139, 0.216, SSE |
| D22 | SPRINGER PHOTOGRAPHI | 10338 W FLAGLER ST | Miami-Dade IW | Lower | 1146, 0.217, SSE |
| D23 | ARTURO ESPINAL, M.D. | 10326 W FLAGLER ST | Miami-Dade IW | Lower | 1161, 0.220, SSE |
| D24 | BILTMORE DENTAL OFFI | 10322 W FLAGLER ST | Miami-Dade IW | Lower | 1167, 0.221, SSE |
| 25 | ALEXANDER PAIN CLINI | 80 NW 107 AVE | Miami-Dade IW | Higher | 1300, 0.246, WSW |
| 26 | DELAL, INC. (UNION 7 | 10690 W FLAGLER ST | LUST, UST, DWM CONTAM, Enforcement, Financial... | Lower | 1455, 0.276, SW |
| 27 | FONTAINEBLEAU MOBIL | 10701 W FLAGLER ST | LUST, UST, Miami-Dade IW, DWM CONTAM, Enforcement,... | Higher | 1493, 0.283, SW |
| E28 | FOUNTAINBLEAU CLEANE | 10686 FONTAINEBLEAU | AIRS, CLEANUP SITES, DWM CONTAM | Higher | 1895, 0.359, NW |
| E29 | OVERNITE TRANSPORTAT | NW 7TH ST & NW 106TH | LUST, TANKS, DWM CONTAM | Higher | 1961, 0.371, NW |
| 30 | FARM STORE #183 | 10198 W FLAGLER ST | LUST, UST, RCRA NonGen / NLR, FINDS, ECHO, DWM... | Lower | 2000, 0.379, ESE |
| 31 | MIAMI BEST CLEANERS | 10686 NW 7TH ST | RCRA-VSQG, PRIORITYCLEANERS, DRYCLEANERS, DWM... | Higher | 2129, 0.403, NW |

# EXECUTIVE SUMMARY

**TARGET PROPERTY SEARCH RESULTS**

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

| Site | Database(s) | EPA ID |
|---|---|---|
| HEMISPHERIC CENTER F<br>10555 W. FLAGLER STR<br>MIAMI, FL 33174 | RCRA-VSQG<br>EPA ID:: FLD984223883<br>PADS<br>EPAID:: FLD984223883<br>FINDS<br>Registry ID:: 110017861919 | FLD984223883 |
| HEMISPHERIC CENTER F<br>10555 W. FLAGLER STR<br>MIAMI, FL 33174 | FTTS<br>Database: FTTS INSP, Date of Government Version: 04/09/2009<br>HIST FTTS<br>Database: HIST FTTS INSP, Date of Government Version: 10/19/2006 | N/A |
| FIU - ENGINEERING CE<br>10555 W FLAGLER ST<br>MIAMI, FL 33174 | ASBESTOS<br>TIER 2<br>Facility Id: 6789334 | N/A |
| FLORIDA INTL UNIVERS<br>10555 W FLAGLER ST<br>MIAMI, FL 33174 | UST<br>Database: Miami-Dade Co. Tanks, Date of Government Version: 05/10/2020<br>Database: UST, Date of Government Version: 11/16/2021<br>Tank Status: B<br>Facility-Site Id: 8839884<br>Facility Status: OPEN<br>Permit Status: FACILITY NO LONGER NEEDS A PERMIT OR CLOSED<br>Facility ID: 199909011843271<br>AST<br>Database: AST, Date of Government Version: 11/16/2021<br>Facility-Site Id: 8839884<br>Facility Status: OPEN<br>Facility Status: OPEN<br>FINDS<br>Registry ID:: 110007456500<br>ECHO<br>Registry ID: 110007456500<br>Miami-Dade Co. GTO<br>Facility Id: 1999030911443950<br>Permit Status: NOTIFIED OF PERMIT REQUIREMENT/IN PROCESS<br>Miami-Dade IW<br>Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT ISSUED<br>Facility ID: 1999091112292590<br>Enforcement<br>Database: Enforcement Miami-Dade, Date of Government Version: 11/22/2021 | N/A |

Facility Status: Closed
Folio Num: 3040050010230

Financial Assurance
Database: Financial Assurance 3, Date of Government Version: 02/02/2022
Facility Status: OPEN
Facility ID: 8839884

NPDES
Status: A
Facility ID: FLR20DP98

FLORIDA INTERNATIONA
10555 WEST FLAGLER S
MIAMI, FL 33199

TIER 2 — N/A
Facility Id: 3990644
Facility Id: 4114057
Facility Id: 5394753
Facility Id: 5007645
Facility Id: 5860611
**Additional key fields are available in the Map Findings section*

FIU SOLAR
10555 WEST FLAGLER S
MIAMI, FL 32174

FINDS — N/A
Registry ID:: 110070397250

**SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

**STANDARD ENVIRONMENTAL RECORDS**

***Lists of state and tribal landfills and solid waste disposal facilities***

SWF/LF: A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| FIU ENGINEERING CENT | 10575 W FLAGLER ST | SSW 1/8 - 1/4 (0.194 mi.) | 7 | 10 |
| Database: SWF/LF, Date of Government Version: 01/10/2022 | | | | |

Facility-Site Id: 103978
Class Status: INACTIVE (I)

***Lists of state and tribal leaking storage tanks***

LUST: A review of the LUST list, as provided by EDR, and dated 11/03/2021 has revealed that there are 5 LUST sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***FONTAINEBLEAU MOBIL*** | ***10701 W FLAGLER ST*** | ***SW 1/4 - 1/2 (0.283 mi.)*** | ***27*** | ***16*** |
| Discharge Cleanup Status: NFA - NFA COMPLETE<br>Facility Status: OPEN<br>Facility-Site Id: 8505259 | | | | |
| ***OVERNITE TRANSPORTAT*** | ***NW 7TH ST & NW 106TH*** | ***NW 1/4 - 1/2 (0.371 mi.)*** | ***E29*** | ***17*** |
| Discharge Cleanup Status: NFA - NFA COMPLETE<br>Facility Status: CLOSED<br>Facility-Site Id: 9807356 | | | | |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SUNSHINE #54*** | ***10450 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.209 mi.)*** | ***B8*** | ***10*** |
| Discharge Cleanup Status: NFA - NFA COMPLETE<br>Discharge Cleanup Status: NREQ - CLEANUP NOT REQUIRED<br>Facility Status: OPEN<br>Facility-Site Id: 8503827 | | | | |
| ***DELAL, INC. (UNION 7*** | ***10690 W FLAGLER ST*** | ***SW 1/4 - 1/2 (0.276 mi.)*** | ***26*** | ***15*** |
| Discharge Cleanup Status: SRCR - SRCR COMPLETE<br>Facility Status: CLOSED<br>Facility-Site Id: 8841202 | | | | |
| ***FARM STORE #183*** | ***10198 W FLAGLER ST*** | ***ESE 1/4 - 1/2 (0.379 mi.)*** | ***30*** | ***18*** |
| Discharge Cleanup Status: NFA - NFA COMPLETE<br>Facility Status: OPEN<br>Facility-Site Id: 8943655 | | | | |

***Lists of state and tribal registered storage tanks***

UST: A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SUNSHINE #54*** | ***10450 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.209 mi.)*** | ***B8*** | ***10*** |
| Database: Miami-Dade Co. Tanks, Date of Government Version: 05/10/2020<br>Database: UST, Date of Government Version: 11/16/2021<br>Tank Status: B<br>Tank Status: U<br>Facility-Site Id: 8503827 | | | | |

Facility Status: OPEN
Permit Status: FACILITY NO LONGER NEEDS A PERMIT OR CLOSED
Facility ID: 8503827
Facility ID: 199909011832494

***Lists of state and tribal brownfield sites***

BROWNFIELDS: A review of the BROWNFIELDS list, as provided by EDR, has revealed that there is 1 BROWNFIELDS site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| SWEETWATER E | | 0 - 1/8 (0.000 mi.) | 0 | 10 |
| Database: BROWNFIELDS AREAS, Date of Government Version: 10/04/2021 | | | | |

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Lists of Hazardous waste / Contaminated Sites***

PRIORITYCLEANERS: A review of the PRIORITYCLEANERS list, as provided by EDR, and dated 07/14/2021 has revealed that there are 2 PRIORITYCLEANERS sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***MIAMI BEST CLEANERS*** | ***10686 NW 7TH ST*** | ***NW 1/4 - 1/2 (0.403 mi.)*** | ***31*** | ***19*** |
| Facility-Site Id: 9500298 | | | | |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***TROPIC CLEANERS*** | ***10404 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***C13*** | ***12*** |
| Facility-Site Id: 9502139 | | | | |

***Other Ascertainable Records***

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 02/28/2022 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***AMOCO SERVICE STATIO*** | ***10450 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.209 mi.)*** | ***B9*** | ***11*** |
| EPA ID:: FLD984213579 | | | | |
| ***TROPIC CLEANERS*** | ***10404 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***C13*** | ***12*** |

EPA ID:: FLD981748627

***GEORGES CLEANERS*** ***10362 W FLAGLER ST*** ***SSE 1/8 - 1/4 (0.212 mi.)*** ***D17*** ***13***
EPA ID:: FLD020557302

Miami-Dade IW: A review of the Miami-Dade IW list, as provided by EDR, has revealed that there are 15 Miami-Dade IW sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ALEXANDER PAIN CLINI | 80 NW 107 AVE | WSW 1/8 - 1/4 (0.246 mi.) | 25 | 15 |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN<br>Facility ID: 1999091113424150 | | | | |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SUNSHINE #54*** | ***10450 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.209 mi.)*** | ***B8*** | ***10*** |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN<br>Facility ID: 1999091111234290 | | | | |
| CLINICA DENTAL SWEET | 10500 W FLAGLER ST | S 1/8 - 1/4 (0.211 mi.) | B10 | 11 |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN<br>Facility ID: 2006030911551700 | | | | |
| CEFERINO PADILLA, M. | 10404 W FLAGLER ST ( | S 1/8 - 1/4 (0.212 mi.) | C11 | 11 |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN<br>Facility ID: 1999091113152110 | | | | |
| MIAMI CARBAR TROPIC | 10404 W FLAGLER ST ( | S 1/8 - 1/4 (0.212 mi.) | C14 | 13 |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN<br>Facility ID: 1999091111303440 | | | | |
| ROLANDO SOMARRIBA, D | 10404 W FLAGLER ST ( | S 1/8 - 1/4 (0.212 mi.) | C15 | 13 |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN<br>Facility ID: 1999091113020110 | | | | |
| DR. HUGO SALGADO-LOV | 10404 W FLAGLER ST ( | S 1/8 - 1/4 (0.212 mi.) | C16 | 13 |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN<br>Facility ID: 1999091109530380 | | | | |
| ***GEORGES CLEANERS*** | ***10362 W FLAGLER ST*** | ***SSE 1/8 - 1/4 (0.212 mi.)*** | ***D17*** | ***13*** |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN<br>Facility ID: 1999091111273830 | | | | |
| RAINBOW GROOMING & L | 10360 W FLAGLER ST | SSE 1/8 - 1/4 (0.212 mi.) | D18 | 14 |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021<br>Permit Status: PERMIT ISSUED<br>Facility ID: 1999091109295960 | | | | |
| UBA EXPRESS CARGO | 10350 W FLAGLER ST | SSE 1/8 - 1/4 (0.214 mi.) | D19 | 14 |
| Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021 | | | | |

Permit Status: PERMIT ISSUED
Facility ID: 2013011411165710

MELISSA MEDICAL CENT — 10346 W FLAGLER ST — SSE 1/8 - 1/4 (0.215 mi.) — D20 — 14
Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021
Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID: 2005072515084390

CLARKE MEDICAL SERVI — 10344-46 W FLAGLER S — SSE 1/8 - 1/4 (0.216 mi.) — D21 — 14
Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021
Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID: 2004041508493320

SPRINGER PHOTOGRAPHI — 10338 W FLAGLER ST — SSE 1/8 - 1/4 (0.217 mi.) — D22 — 15
Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021
Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID: 1999091112291760

ARTURO ESPINAL, M.D. — 10326 W FLAGLER ST — SSE 1/8 - 1/4 (0.220 mi.) — D23 — 15
Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021
Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID: 2005072515041580

BILTMORE DENTAL OFFI — 10322 W FLAGLER ST — SSE 1/8 - 1/4 (0.221 mi.) — D24 — 15
Database: Miami-Dade Co. IW5, Date of Government Version: 11/22/2021
Permit Status: PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID: 2005072515000670

DRYCLEANERS: A review of the DRYCLEANERS list, as provided by EDR, and dated 10/18/2021 has revealed that there are 2 DRYCLEANERS sites within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***TROPIC CLEANERS*** | ***10404 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***C13*** | ***12*** |
| Facility Status: CLOSED<br>Facility-Site Id: 9502139 | | | | |
| ***GEORGES CLEANERS*** | ***10362 W FLAGLER ST*** | ***SSE 1/8 - 1/4 (0.212 mi.)*** | ***D17*** | ***13*** |
| Facility Status: CLOSED<br>Facility-Site Id: 9500246 | | | | |

DWM CONTAM: A review of the DWM CONTAM list, as provided by EDR, and dated 11/30/2021 has revealed that there are 9 DWM CONTAM sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***FONTAINEBLEAU MOBIL*** | ***10701 W FLAGLER ST*** | ***SW 1/4 - 1/2 (0.283 mi.)*** | ***27*** | ***16*** |
| Program Site Id: 8505259 | | | | |
| ***FOUNTAINBLEAU CLEANE*** | ***10686 FONTAINEBLEAU*** | ***NW 1/4 - 1/2 (0.359 mi.)*** | ***E28*** | ***17*** |
| Program Site Id: ERIC_4314 | | | | |
| ***OVERNITE TRANSPORTAT*** | ***NW 7TH ST & NW 106TH*** | ***NW 1/4 - 1/2 (0.371 mi.)*** | ***E29*** | ***17*** |
| Program Site Id: 9807356 | | | | |
| ***MIAMI BEST CLEANERS*** | ***10686 NW 7TH ST*** | ***NW 1/4 - 1/2 (0.403 mi.)*** | ***31*** | ***19*** |

Program Site Id: ERIC_14094

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SUNSHINE #54*** Program Site Id: 8503827 | ***10450 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.209 mi.)*** | ***B8*** | ***10*** |
| ***LEAN KITCHEN CORP.*** Program Site Id: ERIC_4412 | ***10404 W FLAGLER ST (*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***C12*** | ***12*** |
| ***TROPIC CLEANERS*** Program Site Id: ERIC_14093 | ***10404 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***C13*** | ***12*** |
| ***DELAL, INC. (UNION 7*** Program Site Id: 8841202 | ***10690 W FLAGLER ST*** | ***SW 1/4 - 1/2 (0.276 mi.)*** | ***26*** | ***15*** |
| ***FARM STORE #183*** Program Site Id: 8943655 | ***10198 W FLAGLER ST*** | ***ESE 1/4 - 1/2 (0.379 mi.)*** | ***30*** | ***18*** |

RESP PARTY: A review of the RESP PARTY list, as provided by EDR, and dated 12/01/2021 has revealed that there are 2 RESP PARTY sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***MIAMI BEST CLEANERS*** Site Status: CLOSED | ***10686 NW 7TH ST*** | ***NW 1/4 - 1/2 (0.403 mi.)*** | ***31*** | ***19*** |

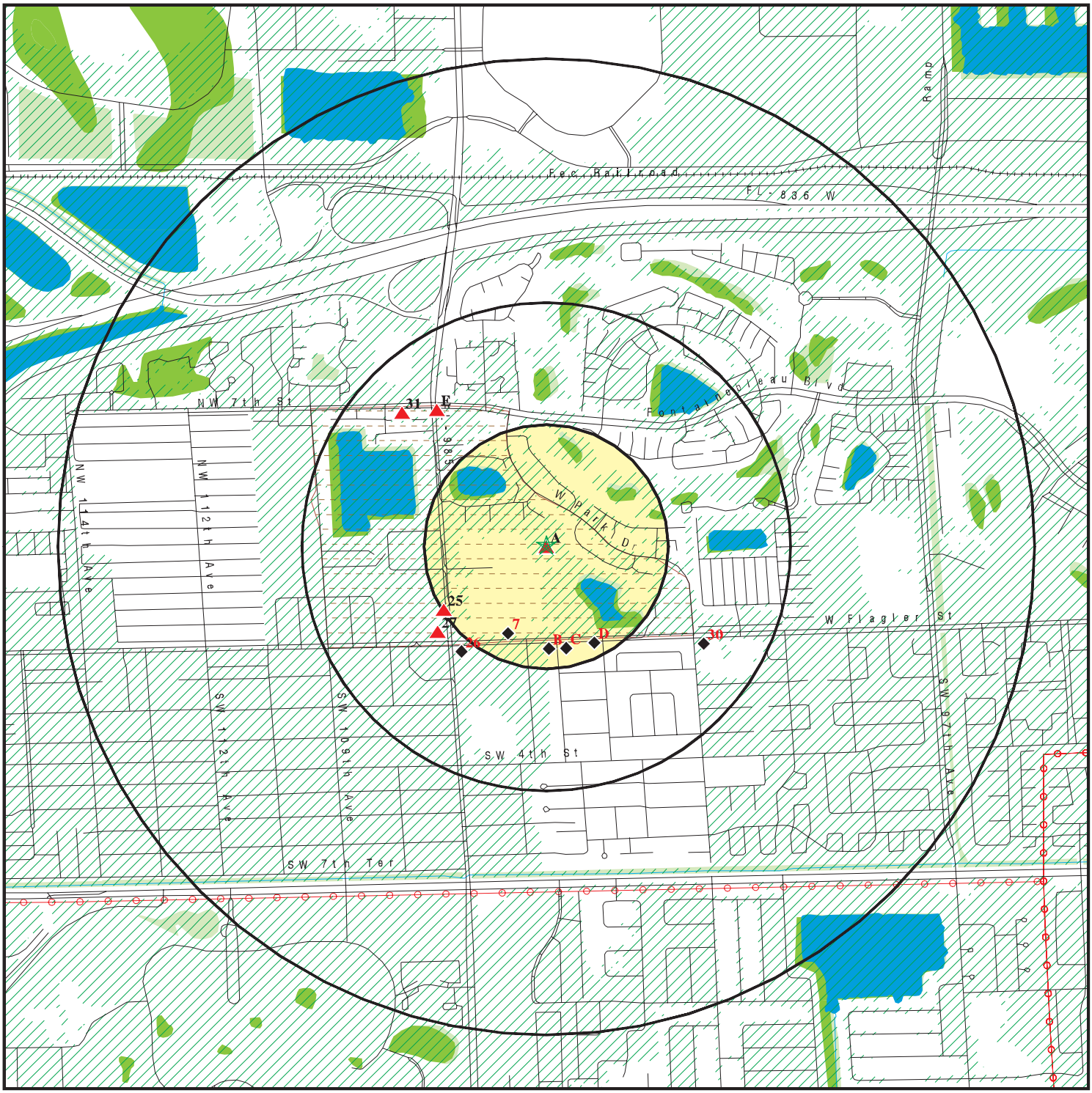
| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***TROPIC CLEANERS*** Site Status: CLOSED | ***10404 W FLAGLER ST*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***C13*** | ***12*** |

Count: 1 records.

ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---|---|---|---|---|---|
| MIAMI | S113898922 | FLORIDA INTERNATIONAL UNIVERSITY | UNIV PARK BLDG. W2 | 33199 | SWF/LF |

# OVERVIEW MAP - 6931685.2S

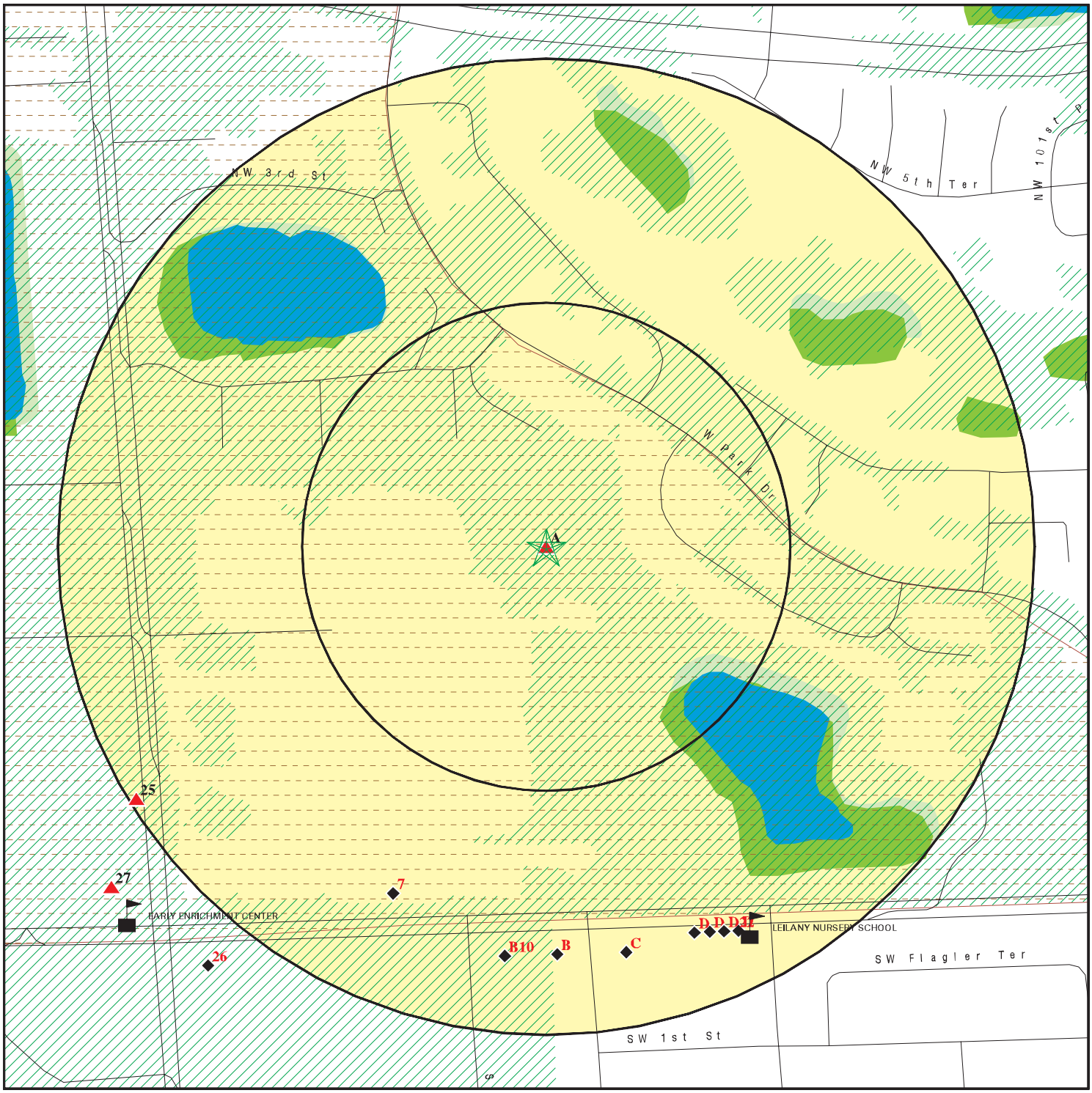



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | |
|---|---|
| SITE NAME: FIU PDT | CLIENT: Jacobs |
| ADDRESS: 10555 West Flagler Street<br>Miami FL 33172 | CONTACT: Christina Mcdonough |
| LAT/LONG: 25.771389 / 80.365833 | INQUIRY #: 6931685.2s<br>DATE: April 08, 2022 9:33 am |

# DETAIL MAP - 6931685.2S




- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | |
|---|---|
| SITE NAME: FIU PDT | CLIENT: Jacobs |
| ADDRESS: 10555 West Flagler Street<br>Miami FL 33172 | CONTACT: Christina Mcdonough |
| LAT/LONG: 25.771389 / 80.365833 | INQUIRY #: 6931685.2s<br>DATE: April 08, 2022 9:34 am |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| **STANDARD ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Lists of Federal NPL (Superfund) sites*** | | | | | | | | |
| NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Proposed NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| NPL LIENS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal Delisted NPL sites*** | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal sites subject to CERCLA removals and CERCLA orders*** | | | | | | | | |
| FEDERAL FACILITY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SEMS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal CERCLA sites with NFRAP*** | | | | | | | | |
| SEMS-ARCHIVE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal RCRA facilities undergoing Corrective Action*** | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal RCRA TSD facilities*** | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal RCRA generators*** | | | | | | | | |
| RCRA-LQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-SQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-VSQG | 0.250 | 1 | 0 | 0 | NR | NR | NR | 1 |
| ***Federal institutional controls / engineering controls registries*** | | | | | | | | |
| LUCIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US INST CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal ERNS list*** | | | | | | | | |
| ERNS | TP | | NR | NR | NR | NR | NR | 0 |
| ***Lists of state- and tribal hazardous waste facilities*** | | | | | | | | |
| SHWS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of state and tribal landfills and solid waste disposal facilities*** | | | | | | | | |
| SWF/LF | 0.500 | | 0 | 1 | 0 | NR | NR | 1 |
| ***Lists of state and tribal leaking storage tanks*** | | | | | | | | |
| LUST | 0.500 | | 0 | 1 | 4 | NR | NR | 5 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| LAST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal registered storage tanks*** | | | | | | | | |
| FF TANKS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FEMA UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| UST | 0.250 | 1 | 0 | 1 | NR | NR | NR | 2 |
| AST | 0.250 | 1 | 0 | 0 | NR | NR | NR | 1 |
| INDIAN UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TANKS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***State and tribal institutional control / engineering control registries*** | | | | | | | | |
| ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INST CONTROL | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal voluntary cleanup sites*** | | | | | | | | |
| INDIAN VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal brownfield sites*** | | | | | | | | |
| BROWNFIELDS | 0.500 | | 1 | 0 | 0 | NR | NR | 1 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Local Brownfield lists*** | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Landfill / Solid Waste Disposal Sites*** | | | | | | | | |
| SWRCY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DEBRIS REGION 9 | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| IHS OPEN DUMPS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Hazardous waste / Contaminated Sites*** | | | | | | | | |
| US HIST CDL | TP | | NR | NR | NR | NR | NR | 0 |
| PRIORITYCLEANERS | 0.500 | | 0 | 1 | 1 | NR | NR | 2 |
| Fl Sites | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| US CDL | TP | | NR | NR | NR | NR | NR | 0 |
| PFAS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| AQUEOUS FOAM | TP | | NR | NR | NR | NR | NR | 0 |
| ***Local Land Records*** | | | | | | | | |
| LIENS 2 | TP | | NR | NR | NR | NR | NR | 0 |
| ***Records of Emergency Release Reports*** | | | | | | | | |
| HMIRS | TP | | NR | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| SPILLS | TP | | NR | NR | NR | NR | NR | 0 |
| Miami-Dade Co. SPILL | TP | | NR | NR | NR | NR | NR | 0 |
| SPILLS 90 | TP | | NR | NR | NR | NR | NR | 0 |
| SPILLS 80 | TP | | NR | NR | NR | NR | NR | 0 |
| ***Other Ascertainable Records*** | | | | | | | | |
| RCRA NonGen / NLR | 0.250 | | 0 | 3 | NR | NR | NR | 3 |
| FUDS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCRD DRYCLEANERS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US FIN ASSUR | TP | | NR | NR | NR | NR | NR | 0 |
| EPA WATCH LIST | TP | | NR | NR | NR | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TSCA | TP | | NR | NR | NR | NR | NR | 0 |
| TRIS | TP | | NR | NR | NR | NR | NR | 0 |
| SSTS | TP | | NR | NR | NR | NR | NR | 0 |
| ROD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| RMP | TP | | NR | NR | NR | NR | NR | 0 |
| RAATS | TP | | NR | NR | NR | NR | NR | 0 |
| PRP | TP | | NR | NR | NR | NR | NR | 0 |
| PADS | TP | 1 | NR | NR | NR | NR | NR | 1 |
| ICIS | TP | | NR | NR | NR | NR | NR | 0 |
| FTTS | TP | 1 | NR | NR | NR | NR | NR | 1 |
| MLTS | TP | | NR | NR | NR | NR | NR | 0 |
| COAL ASH DOE | TP | | NR | NR | NR | NR | NR | 0 |
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| PCB TRANSFORMER | TP | | NR | NR | NR | NR | NR | 0 |
| RADINFO | TP | | NR | NR | NR | NR | NR | 0 |
| HIST FTTS | TP | 1 | NR | NR | NR | NR | NR | 1 |
| DOT OPS | TP | | NR | NR | NR | NR | NR | 0 |
| CONSENT | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| INDIAN RESERV | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| FUSRAP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UMTRA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| LEAD SMELTERS | TP | | NR | NR | NR | NR | NR | 0 |
| US AIRS | TP | | NR | NR | NR | NR | NR | 0 |
| US MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ABANDONED MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FINDS | TP | 3 | NR | NR | NR | NR | NR | 3 |
| DOCKET HWC | TP | | NR | NR | NR | NR | NR | 0 |
| ECHO | TP | 1 | NR | NR | NR | NR | NR | 1 |
| UXO | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| FUELS PROGRAM | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| AIRS | TP | | NR | NR | NR | NR | NR | 0 |
| ASBESTOS | TP | 1 | NR | NR | NR | NR | NR | 1 |
| CLEANUP SITES | TP | | NR | NR | NR | NR | NR | 0 |
| Miami-Dade Co. AP | TP | | NR | NR | NR | NR | NR | 0 |
| Miami-Dade Co. GTO | TP | 1 | NR | NR | NR | NR | NR | 1 |
| Miami-Dade Co. MOP | TP | | NR | NR | NR | NR | NR | 0 |
| Miami-Dade Co. MRE | TP | | NR | NR | NR | NR | NR | 0 |
| Miami-Dade Co. HWS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| Miami-Dade IW | 0.250 | 1 | 0 | 15 | NR | NR | NR | 16 |
| Miami-Dade Co. IWP | TP | | NR | NR | NR | NR | NR | 0 |
| DADE CO LW | TP | | NR | NR | NR | NR | NR | 0 |
| DEDB | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| DRYCLEANERS | 0.250 | | 0 | 2 | NR | NR | NR | 2 |
| DWM CONTAM | 0.500 | | 0 | 3 | 6 | NR | NR | 9 |
| Enforcement | TP | 1 | NR | NR | NR | NR | NR | 1 |
| Financial Assurance | TP | 1 | NR | NR | NR | NR | NR | 1 |
| FL Cattle Dip. Vats | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| HW GEN | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RESP PARTY | 0.500 | | 0 | 1 | 1 | NR | NR | 2 |
| SITE INV SITES | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| TIER 2 | TP | 2 | NR | NR | NR | NR | NR | 2 |
| UIC | TP | | NR | NR | NR | NR | NR | 0 |
| DADE CO AW | TP | | NR | NR | NR | NR | NR | 0 |
| NPDES | TP | 1 | NR | NR | NR | NR | NR | 1 |
| MINES MRDS | TP | | NR | NR | NR | NR | NR | 0 |
| **EDR HIGH RISK HISTORICAL RECORDS** | | | | | | | | |
| ***EDR Exclusive Records*** | | | | | | | | |
| EDR MGP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| EDR Hist Auto | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| EDR Hist Cleaner | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| **EDR RECOVERED GOVERNMENT ARCHIVES** | | | | | | | | |
| ***Exclusive Recovered Govt. Archives*** | | | | | | | | |
| RGA HWS | TP | | NR | NR | NR | NR | NR | 0 |
| RGA LF | TP | | NR | NR | NR | NR | NR | 0 |
| RGA LUST | TP | | NR | NR | NR | NR | NR | 0 |
| - Totals -- | | 18 | 1 | 28 | 12 | 0 | 0 | 59 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

**A1**
**Target**
**Property**

**HEMISPHERIC CENTER FOR ENVIRONMENTAL**
**10555 W. FLAGLER STREET**
**MIAMI, FL 33174**

**RCRA-VSQG**
**PADS**
**FINDS**

**1015757387**
**FLD984223883**

**Actual:**
**5 ft.**

Click here for full text details

**RCRA-VSQG**
EPA Id FLD984223883

**PADS**
EPAID: FLD984223883

**FINDS**
Registry ID: 110017861919

---

**A2**
**Target**
**Property**

**HEMISPHERIC CENTER FOR ENVIRONMENTAL**
**10555 W. FLAGLER STREET**
**MIAMI, FL 33174**

**FTTS**
**HIST FTTS**

**1007464504**
**N/A**

**Actual:**
**5 ft.**

Click here for full text details

---

**A3**
**Target**
**Property**

**FIU - ENGINEERING CENTER**
**10555 W FLAGLER ST**
**MIAMI, FL 33174**

**ASBESTOS**
**TIER 2**

**S121149733**
**N/A**

**Actual:**
**5 ft.**

Click here for full text details

**TIER 2**
Facility Id 6789334

---

**A4**
**Target**
**Property**

**FLORIDA INTL UNIVERSITY CEAS**
**10555 W FLAGLER ST**
**MIAMI, FL 33174**

**UST**
**AST**
**FINDS**
**ECHO**
**Miami-Dade Co. GTO**
**Miami-Dade IW**
**Enforcement**
**Financial Assurance**
**NPDES**

**1000993922**
**N/A**

**Actual:**
**5 ft.**

Click here for full text details

**UST**
Facility Status OPEN
Facility-Site Id 8839884
Facility ID 199909011843271
Permit Status FACILITY NO LONGER NEEDS A PERMIT OR CLOSED

Click here for Florida Oculus

**AST**

**FLORIDA INTL UNIVERSITY CEAS (Continued)** **1000993922**

Facility Status OPEN
Facility-Site Id 8839884
Facility Status OPEN

Click here for Florida Oculus

**FINDS**
Registry ID: 110007456500

**ECHO**
Registry ID 110007456500

**Miami-Dade Co. GTO**
Facility Id 1999030911443950
Permit Status NOTIFIED OF PERMIT REQUIREMENT/IN PROCESS

**Miami-Dade IW**
Permit Status PERMIT ISSUED
Facility ID 1999091112292590

**Enforcement**
Facility Status Closed
Folio Num 3040050010230

**Financial Assurance**
Facility Status OPEN
Facility ID 8839884

**NPDES**
Facility ID FLR20DP98
Status A

---

**A5** **FLORIDA INTERNATIONAL UNIVERSITY - ENGINEERING CAM** **TIER 2** **S107718428**
**Target** **10555 WEST FLAGLER STREET** **N/A**
**Property** **MIAMI, FL 33199**

**Actual:**
**5 ft.**

Click here for full text details

**TIER 2**
Facility Id 3990644
Facility Id 4114057
Facility Id 5394753
Facility Id 5007645
Facility Id 5860611
Facility Id 4554652

**A6**
**Target**
**Property**

**FIU SOLAR**
**10555 WEST FLAGLER STREET**
**MIAMI, FL 32174**

**FINDS** **1024608889**
**N/A**

**Actual:**
**5 ft.**

Click here for full text details

**FINDS**
Registry ID: 110070397250

---

**SWEETWATER E**

**BROWNFIELDS** **S109332440**
**N/A**

**< 1/8**
**1 ft.**

**SWEETWATER, FL**

Click here for full text details

---

**7**
**SSW**
**1/8-1/4**
**0.194 mi.**
**1024 ft.**

**Relative:**
**Lower**

**FIU ENGINEERING CENTER**
**10575 W FLAGLER ST**
**MIAMI, FL 33174**

**SWF/LF** **S120835014**
**N/A**

Click here for full text details

**SWF/LF**
Facility-Site Id 103978
Class Status INACTIVE (I)

Click here for Florida Oculus

---

**B8**
**South**
**1/8-1/4**
**0.209 mi.**
**1102 ft.**

**Relative:**
**Lower**

**SUNSHINE #54**
**10450 W FLAGLER ST**
**MIAMI, FL 33174**

**LUST** **U003741213**
**UST** **N/A**
**Miami-Dade IW**
**DWM CONTAM**
**Enforcement**
**Financial Assurance**

Click here for full text details

**LUST**
Facility Status OPEN
Facility-Site Id 8503827
Discharge Cleanup Status NFA - NFA COMPLETE
Discharge Cleanup Status NREQ - CLEANUP NOT REQUIRED

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**UST**
Facility Status OPEN
Facility-Site Id 8503827
Facility ID 8503827
Facility ID 199909011832494
Permit Status FACILITY NO LONGER NEEDS A PERMIT OR CLOSED

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**Miami-Dade IW**

**SUNSHINE #54 (Continued)** **U003741213**

Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 1999091111234290

**DWM CONTAM**
Program Site Id 8503827

**Enforcement**
Facility Status Closed
Folio Num 2540050030040

**Financial Assurance**
Facility Status OPEN
Facility ID 8503827

---

**B9**
**South**
**1/8-1/4**
**0.209 mi.**
**1102 ft.**

**Relative:**
**Lower**

**AMOCO SERVICE STATION #4372** **Miami-Dade Co. SPILL** **1000702894**
**10450 W FLAGLER ST** **RCRA NonGen / NLR** **FLD984213579**
**MIAMI, FL 33174**

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**Miami-Dade Co. SPILL**
Facility ID 000582

**RCRA NonGen / NLR**
EPA Id FLD984213579

---

**B10**
**South**
**1/8-1/4**
**0.211 mi.**
**1112 ft.**

**Relative:**
**Lower**

**CLINICA DENTAL SWEETWATER-CARLOS M.CARDENAS D.D.S.** **Miami-Dade IW** **S107796426**
**10500 W FLAGLER ST** **N/A**
**SWEETWATER, FL 33174**

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 2006030911551700

---

**C11**
**South**
**1/8-1/4**
**0.212 mi.**
**1117 ft.**

**Relative:**
**Lower**

**CEFERINO PADILLA, M.D.** **Miami-Dade IW** **S104290160**
**10404 W FLAGLER ST (BAY 15)** **N/A**
**MIAMI, FL 33174**

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 1999091113152110

**C12**
**South**
**1/8-1/4**
**0.212 mi.**
**1117 ft.**

**Relative:**
**Lower**

**LEAN KITCHEN CORP.**
**10404 W FLAGLER ST (#19)**
**SWEETWATER, FL 33174**

**CLEANUP SITES**
**Miami-Dade Co. GTO**
**DWM CONTAM**
**Enforcement**

**S104246956**
**N/A**

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**CLEANUP SITES**
DEP Cleanup Site Key 69327740

**Miami-Dade Co. GTO**
Facility Id 1999030910243540
Permit Status NOTIFIED OF PERMIT REQUIREMENT/IN PROCESS

**DWM CONTAM**
Program Site Id ERIC_4412

**Enforcement**
Facility Status Closed
Folio Num 2540050450010

---

**C13**
**South**
**1/8-1/4**
**0.212 mi.**
**1117 ft.**

**Relative:**
**Lower**

**TROPIC CLEANERS**
**10404 W FLAGLER ST**
**MIAMI, FL 33174**

**PRIORITYCLEANERS**
**RCRA NonGen / NLR**
**Miami-Dade Co. GTO**
**DRYCLEANERS**
**DWM CONTAM**
**RESP PARTY**

**1000299007**
**FLD981748627**

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**PRIORITYCLEANERS**
Facility-Site Id 9502139

**RCRA NonGen / NLR**
EPA Id FLD981748627

**Miami-Dade Co. GTO**
Facility Id 1999030910235550
Permit Status NOTIFIED OF PERMIT REQUIREMENT/IN PROCESS

**DRYCLEANERS**
Facility-Site Id 9502139
Facility Status CLOSED

**DWM CONTAM**
Program Site Id ERIC_14093

**RESP PARTY**
Site Status CLOSED

**C14**
**South**
**1/8-1/4**
**0.212 mi.**
**1117 ft.**

**Relative:**
**Lower**

**MIAMI CARBAR TROPIC CLEANERS** — **Miami-Dade IW** — **S104285962**
**10404 W FLAGLER ST (BAY 1-2)** — **N/A**
**MIAMI, FL 33174**

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 1999091111303440

---

**C15**
**South**
**1/8-1/4**
**0.212 mi.**
**1117 ft.**

**Relative:**
**Lower**

**ROLANDO SOMARRIBA, DDS** — **Miami-Dade IW** — **S104289177**
**10404 W FLAGLER ST (BAY 8)** — **N/A**
**MIAMI, FL 33174**

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 1999091113020110

---

**C16**
**South**
**1/8-1/4**
**0.212 mi.**
**1117 ft.**

**Relative:**
**Lower**

**DR. HUGO SALGADO-LOVO, M.D.** — **Miami-Dade IW** — **S104290159**
**10404 W FLAGLER ST (BAY 13)** — **N/A**
**MIAMI, FL 33174**

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 1999091109530380

---

**D17**
**SSE**
**1/8-1/4**
**0.212 mi.**
**1118 ft.**

**Relative:**
**Lower**

**GEORGES CLEANERS** — **RCRA NonGen / NLR** — **1000357385**
**10362 W FLAGLER ST** — **FINDS** — **FLD020557302**
**MIAMI, FL 33174** — **ECHO**
**Miami-Dade Co. AP**
**Miami-Dade IW**
**DRYCLEANERS**

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**RCRA NonGen / NLR**
EPA Id FLD020557302

**FINDS**
Registry ID: 110008322877

**ECHO**
Registry ID 110008322877

**Miami-Dade Co. AP**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility Id 1999042113291020

**Miami-Dade IW**

**GEORGES CLEANERS (Continued)** **1000357385**

Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 1999091111273830

**DRYCLEANERS**
Facility-Site Id 9500246
Facility Status CLOSED

---

**D18**
**SSE**
**1/8-1/4**
**0.212 mi.**
**1120 ft.**

**Relative:**
**Lower**

**RAINBOW GROOMING & LAY'S PET SHOP, INC.** **Miami-Dade IW** **S103446888**
**10360 W FLAGLER ST** **N/A**
**SWEETWATER, FL 33174**

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**Miami-Dade IW**
Permit Status PERMIT ISSUED
Facility ID 1999091109295960

---

**D19**
**SSE**
**1/8-1/4**
**0.214 mi.**
**1131 ft.**

**Relative:**
**Lower**

**UBA EXPRESS CARGO** **Miami-Dade IW** **S117357209**
**10350 W FLAGLER ST** **N/A**
**MIAMI, FL 33174**

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**Miami-Dade IW**
Permit Status PERMIT ISSUED
Facility ID 2013011411165710

---

**D20**
**SSE**
**1/8-1/4**
**0.215 mi.**
**1136 ft.**

**Relative:**
**Lower**

**MELISSA MEDICAL CENTER CORP.** **Miami-Dade IW** **S107549912**
**10346 W FLAGLER ST** **N/A**
**MIAMI, FL 33174**

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 2005072515084390

---

**D21**
**SSE**
**1/8-1/4**
**0.216 mi.**
**1139 ft.**

**Relative:**
**Lower**

**CLARKE MEDICAL SERVICES, INC.** **Miami-Dade IW** **S106911676**
**10344-46 W FLAGLER ST** **N/A**
**MIAMI, FL 33174**

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 2004041508493320

**D22**
**SSE**
**1/8-1/4**
**0.217 mi.**
**1146 ft.**

**Relative:**
**Lower**

**SPRINGER PHOTOGRAPHIC**
**10338 W FLAGLER ST**
**MIAMI, FL 33174**

**Database(s):** Miami-Dade IW
**EDR ID Number:** S104288438
**EPA ID Number:** N/A

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 1999091112291760

---

**D23**
**SSE**
**1/8-1/4**
**0.220 mi.**
**1161 ft.**

**Relative:**
**Lower**

**ARTURO ESPINAL, M.D.**
**10326 W FLAGLER ST**
**MIAMI, FL 33174**

**Database(s):** Miami-Dade IW
**EDR ID Number:** S107549844
**EPA ID Number:** N/A

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 2005072515041580

---

**D24**
**SSE**
**1/8-1/4**
**0.221 mi.**
**1167 ft.**

**Relative:**
**Lower**

**BILTMORE DENTAL OFFICE**
**10322 W FLAGLER ST**
**SWEETWATER, FL 33174**

**Database(s):** Miami-Dade IW
**EDR ID Number:** S107549918
**EPA ID Number:** N/A

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 2005072515000670

---

**25**
**WSW**
**1/8-1/4**
**0.246 mi.**
**1300 ft.**

**Relative:**
**Higher**

**ALEXANDER PAIN CLINIC**
**80 NW 107 AVE**
**MIAMI, FL 33174**

**Database(s):** Miami-Dade IW
**EDR ID Number:** S104290407
**EPA ID Number:** N/A

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**Miami-Dade IW**
Permit Status PERMIT NO LONGER NEEDED/CLOSED/WITHDRAWN
Facility ID 1999091113424150

---

**26**
**SW**
**1/4-1/2**
**0.276 mi.**
**1455 ft.**

**Relative:**
**Lower**

**DELAL, INC. (UNION 76-FLAGLER)**
**10690 W FLAGLER ST**
**MIAMI, FL 33174**

**Database(s):** LUST, UST, DWM CONTAM, Enforcement, Financial Assurance
**EDR ID Number:** U003742313
**EPA ID Number:** N/A

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**LUST**
Facility Status CLOSED
Facility-Site Id 8841202
Discharge Cleanup Status SRCR - SRCR COMPLETE

**DELAL, INC. (UNION 76-FLAGLER) (Continued)** **U003742313**

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**UST**
Facility Status CLOSED
Facility-Site Id 8841202
Facility ID 199909011841495
Permit Status FACILITY NO LONGER NEEDS A PERMIT OR CLOSED

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**DWM CONTAM**
Program Site Id 8841202

**Enforcement**
Facility Status Closed
Folio Num 2540050010450

**Financial Assurance**
Facility Status CLOSED
Facility ID 8841202

---

**27**
**SW**
**1/4-1/2**
**0.283 mi.**
**1493 ft.**

**Relative:**
**Higher**

**FONTAINEBLEAU MOBIL**
**10701 W FLAGLER ST**
**MIAMI, FL 33174**

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**LUST** **U003743620**
**UST** **N/A**
**Miami-Dade IW**
**DWM CONTAM**
**Enforcement**
**Financial Assurance**

**LUST**
Facility Status OPEN
Facility-Site Id 8505259
Discharge Cleanup Status NFA - NFA COMPLETE

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**UST**
Facility Status OPEN
Facility-Site Id 8505259
Facility ID 199909011835284
Permit Status FACILITY NO LONGER NEEDS A PERMIT OR CLOSED

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**Miami-Dade IW**
Permit Status PERMIT ISSUED
Facility ID 1999091109582610

**DWM CONTAM**

**FONTAINEBLEAU MOBIL (Continued)** **U003743620**

Program Site Id 8505259

**Enforcement**
Facility Status Closed
Folio Num 3040060270030

**Financial Assurance**
Facility Status OPEN
Facility ID 8505259

---

**E28**
**NW**
**1/4-1/2**
**0.359 mi.**
**1895 ft.**

**Relative:**
**Higher**

**FOUNTAINBLEAU CLEANERS INC** **AIRS** **S118559880**
**10686 FONTAINEBLEAU BLVD** **CLEANUP SITES** **N/A**
**MIAMI, FL 33172** **DWM CONTAM**

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**AIRS**
Facility Id 250867
Facility Status A

**CLEANUP SITES**
DEP Cleanup Site Key 69327470

**DWM CONTAM**
Program Site Id ERIC_4314

---

**E29**
**NW**
**1/4-1/2**
**0.371 mi.**
**1961 ft.**

**Relative:**
**Higher**

**OVERNITE TRANSPORTATION TRUCK ACCIDENT** **LUST** **U004010072**
**NW 7TH ST & NW 106TH AVE** **TANKS** **N/A**
**MIAMI, FL 33172** **DWM CONTAM**

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**LUST**
Facility Status CLOSED
Facility-Site Id 9807356
Discharge Cleanup Status NFA - NFA COMPLETE

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**TANKS**
Facility Status CLOSED
Facility ID 9807356

**DWM CONTAM**
Program Site Id 9807356

**30**
**ESE**
**1/4-1/2**
**0.379 mi.**
**2000 ft.**

**Relative:**
**Lower**

**FARM STORE #183**
**10198 W FLAGLER ST**
**MIAMI, FL 33174**

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**LUST** **1000701486**
**UST** **FLD984185116**
**RCRA NonGen / NLR**
**FINDS**
**ECHO**
**DWM CONTAM**
**Enforcement**
**Financial Assurance**

**LUST**
Facility Status OPEN
Facility-Site Id 8943655
Discharge Cleanup Status NFA - NFA COMPLETE

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**UST**
Facility Status OPEN
Facility-Site Id 8943655
Facility ID 199909011843225
Permit Status FACILITY NO LONGER NEEDS A PERMIT OR CLOSED

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**RCRA NonGen / NLR**
EPA Id FLD984185116

**FINDS**
Registry ID: 110007440698

**ECHO**
Registry ID 110007440698

**DWM CONTAM**
Program Site Id 8943655

**Enforcement**
Facility Status Closed
Folio Num 3040050480020

**Financial Assurance**
Facility Status OPEN
Facility ID 8943655

**31**
**NW**
**1/4-1/2**
**0.403 mi.**
**2129 ft.**

**Relative:**
**Higher**

**MIAMI BEST CLEANERS**
**10686 NW 7TH ST**
**MIAMI, FL 33172**

**RCRA-VSQG**
**PRIORITYCLEANERS**
**DRYCLEANERS**
**DWM CONTAM**
**RESP PARTY**

**1000395770**
**FLD981758352**

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**RCRA-VSQG**
EPA Id FLD981758352

**PRIORITYCLEANERS**
Facility-Site Id 9500298

**DRYCLEANERS**
Facility-Site Id 9500298
Facility Status OPEN

**DWM CONTAM**
Program Site Id ERIC_14094

**RESP PARTY**
Site Status CLOSED

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym | Full Name | Government Agency | Gov Date | Arvl. Date | Active Date |
|---|---|---|---|---|---|---|
| FL | AIRS | Permitted Facilities Listing | Department of Environmental Protection | 01/26/2021 | 01/28/2021 | 02/03/2021 |
| FL | AQUEOUS FOAM | Former Fire Training Facility Assessments Listing | Department of Environmental Protection | 06/03/2021 | 06/09/2021 | 10/28/2021 |
| FL | ASBESTOS | Asbestos Notification Listing | Department of Environmental Protection | 11/11/2021 | 11/12/2021 | 01/31/2022 |
| FL | AST | Storage Tank Facility Information | Department of Environmental Protection | 11/16/2021 | 11/16/2021 | 02/04/2022 |
| FL | BROWNFIELDS | Brownfields Sites Database | Department of Environmental Protection | 10/27/2021 | 12/21/2021 | 03/09/2022 |
| FL | BROWNFIELDS AREAS | Brownfields Areas Database | Department of Environmental Protection | 10/04/2021 | 12/21/2021 | 03/09/2022 |
| FL | BSRA | Brownfield Site Rehabilitation Agreements Listing | Department of Environmental Protection | 04/23/2021 | 06/24/2021 | 09/21/2021 |
| FL | CLEANUP SITES | DEP Cleanup Sites - Contamination Locator Map Listing | Department of Environmental Protection | 11/17/2021 | 11/19/2021 | 02/07/2022 |
| FL | DEDB | Ethylene Dibromide Database Results | Department of Environmental Protection | 12/08/2021 | 12/09/2021 | 02/25/2022 |
| FL | DRYCLEANERS | Drycleaning Facilities | Department of Environmental Protection | 10/18/2021 | 10/19/2021 | 01/11/2022 |
| FL | DWM CONTAM | DWM CONTAMINATED SITES | Department of Environmental Protection | 11/30/2021 | 01/04/2022 | 03/21/2022 |
| FL | ENG CONTROLS | Institutional Controls Registry | Department of Environmental Protection | 12/08/2021 | 12/22/2021 | 03/09/2022 |
| FL | FF TANKS | Federal Facilities Listing | Department of Environmental Protection | 12/20/2021 | 12/20/2021 | 03/08/2022 |
| FL | FL Cattle Dip. Vats | Cattle Dipping Vats | Department of Environmental Protection | 09/27/2019 | 01/10/2020 | 02/11/2020 |
| FL | FL SITES | Sites List | Department of Environmental Protection | 12/31/1989 | 05/09/1994 | 08/04/1994 |
| FL | Financial Assurance 1 | Financial Assurance Information Listing | Department of Environmental Protection | 07/12/2021 | 10/26/2021 | 01/14/2022 |
| FL | Financial Assurance 2 | Financial Assurance Information Listing | Department of Environmental Protection | 10/28/2021 | 10/29/2021 | 01/18/2022 |
| FL | Financial Assurance 3 | Financial Assurance Information Listing | Department of Environmental Protection | 02/02/2022 | 02/03/2022 | 02/07/2022 |
| FL | HW GEN | Hazardous Waste Generators | Department of Environmental Protection | 08/11/2021 | 12/17/2021 | 03/08/2022 |
| FL | Inst Control | Institutional Controls Registry | Department of Environmental Protection | 12/08/2021 | 12/22/2021 | 03/09/2022 |
| FL | LAST | Leaking Aboveground Storage Tank Listing | Department of Environmental Protection | 01/24/2022 | 01/25/2022 | 02/09/2022 |
| FL | LUST | Petroleum Contamination Detail Report | Department of Environmental Protection | 11/03/2021 | 11/05/2021 | 01/25/2022 |
| FL | PFAS | PFOS and PFOA stand for perfluorooctane sulfonate and perflu | Department of Environmental Protection | 10/28/2021 | 10/29/2021 | 11/09/2021 |
| FL | PRIORITYCLEANERS | Priority Ranking List | Department of Environmental Protection | 07/14/2021 | 08/10/2021 | 11/03/2021 |
| FL | RESP PARTY | Responsible Party Sites Listing | Department of Environmental Protection | 12/01/2021 | 12/22/2021 | 03/09/2022 |
| FL | RGA HWS | Recovered Government Archive State Hazardous Waste Facilitie | Department of Environmental Protection | | 07/01/2013 | 12/30/2013 |
| FL | RGA LF | Recovered Government Archive Solid Waste Facilities List | Department of Environmental Protection | | 07/01/2013 | 01/10/2014 |
| FL | RGA LUST | Recovered Government Archive Leaking Underground Storage Tan | Department of Environmental Protection | | 07/01/2013 | 12/30/2013 |
| FL | SHWS | Florida's State-Funded Action Sites | Department of Environmental Protection | 10/21/2021 | 11/15/2021 | 02/04/2022 |
| FL | SITE INV SITES | Site Investigation Section Sites Listing | Department of Environmental Protection | 11/12/2021 | 11/15/2021 | 02/04/2022 |
| FL | SPILLS | Oil and Hazardous Materials Incidents | Department of Environmental Protection | 12/28/2021 | 12/28/2021 | 03/21/2022 |
| FL | SPILLS 80 | SPILLS80 data from FirstSearch | FirstSearch | 09/01/2001 | 01/03/2013 | 03/06/2013 |
| FL | SPILLS 90 | SPILLS90 data from FirstSearch | FirstSearch | 12/10/2012 | 01/03/2013 | 03/04/2013 |
| FL | SWF/LF | Solid Waste Facility Database | Department of Environmental Protection | 01/10/2022 | 01/11/2022 | 03/28/2022 |
| FL | SWRCY | Recycling Centers | Department of Environmental Protection | 12/03/2018 | 01/15/2019 | 03/14/2019 |
| FL | TANKS | Storage Tank Facility List | Department of Environmental Protection | 11/16/2021 | 11/16/2021 | 02/04/2022 |
| FL | TIER 2 | Tier 2 Facility Listing | Department of Environmental Protection | 12/31/2020 | 06/21/2021 | 09/14/2021 |
| FL | UIC | Underground Injection Wells Database Listing | Department of Environmental Protection | 01/20/2022 | 01/20/2022 | 01/27/2022 |
| FL | UST | Storage Tank Facility Information | Department of Environmental Protection | 11/16/2021 | 11/16/2021 | 02/04/2022 |
| FL | VCP | Voluntary Cleanup Sites | Department of Environmental Protection | 04/27/2021 | 05/14/2021 | 07/27/2021 |
| FL | WASTEWATER | Wastewater Facility Regulation Database | Department of Environmental Protection | 11/01/2021 | 11/03/2021 | 01/25/2022 |
| US | 2020 COR ACTION | 2020 Corrective Action Program List | Environmental Protection Agency | 09/30/2017 | 05/08/2018 | 07/20/2018 |
| US | ABANDONED MINES | Abandoned Mines | Department of Interior | 12/14/2021 | 12/15/2021 | 03/10/2022 |
| US | BRS | Biennial Reporting System | EPA/NTIS | 12/31/2019 | 03/02/2022 | 03/25/2022 |
| US | COAL ASH DOE | Steam-Electric Plant Operation Data | Department of Energy | 12/31/2020 | 11/30/2021 | 02/22/2022 |
| US | COAL ASH EPA | Coal Combustion Residues Surface Impoundments List | Environmental Protection Agency | 01/12/2017 | 03/05/2019 | 11/11/2019 |
| US | CONSENT | Superfund (CERCLA) Consent Decrees | Department of Justice, Consent Decree Library | 12/31/2021 | 01/14/2022 | 03/25/2022 |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym | Full Name | Government Agency | Gov Date | Arvl. Date | Active Date |
|---|---|---|---|---|---|---|
| US | CORRACTS | Corrective Action Report | EPA | 02/28/2022 | 03/02/2022 | 03/17/2022 |
| US | DEBRIS REGION 9 | Torres Martinez Reservation Illegal Dump Site Locations | EPA, Region 9 | 01/12/2009 | 05/07/2009 | 09/21/2009 |
| US | DOCKET HWC | Hazardous Waste Compliance Docket Listing | Environmental Protection Agency | 05/06/2021 | 05/21/2021 | 08/11/2021 |
| US | DOD | Department of Defense Sites | USGS | 06/07/2021 | 07/13/2021 | 03/09/2022 |
| US | DOT OPS | Incident and Accident Data | Department of Transporation, Office of Pipeli | 01/02/2020 | 01/28/2020 | 04/17/2020 |
| US | Delisted NPL | National Priority List Deletions | EPA | 01/25/2022 | 02/03/2022 | 02/22/2022 |
| US | ECHO | Enforcement & Compliance History Information | Environmental Protection Agency | 01/01/2022 | 01/04/2022 | 01/10/2022 |
| US | EDR Hist Auto | EDR Exclusive Historical Auto Stations | EDR, Inc. | | | |
| US | EDR Hist Cleaner | EDR Exclusive Historical Cleaners | EDR, Inc. | | | |
| US | EDR MGP | EDR Proprietary Manufactured Gas Plants | EDR, Inc. | | | |
| US | EPA WATCH LIST | EPA WATCH LIST | Environmental Protection Agency | 08/30/2013 | 03/21/2014 | 06/17/2014 |
| US | ERNS | Emergency Response Notification System | National Response Center, United States Coast | 12/31/2021 | 03/01/2022 | 03/10/2022 |
| US | FEDERAL FACILITY | Federal Facility Site Information listing | Environmental Protection Agency | 05/25/2021 | 06/24/2021 | 09/20/2021 |
| US | FEDLAND | Federal and Indian Lands | U.S. Geological Survey | 04/02/2018 | 04/11/2018 | 11/06/2019 |
| US | FEMA UST | Underground Storage Tank Listing | FEMA | 10/14/2021 | 11/05/2021 | 02/01/2022 |
| US | FINDS | Facility Index System/Facility Registry System | EPA | 11/04/2021 | 11/22/2021 | 02/25/2022 |
| US | FTTS | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu | EPA/Office of Prevention, Pesticides and Toxi | 04/09/2009 | 04/16/2009 | 05/11/2009 |
| US | FTTS INSP | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu | EPA | 04/09/2009 | 04/16/2009 | 05/11/2009 |
| US | FUDS | Formerly Used Defense Sites | U.S. Army Corps of Engineers | 10/26/2021 | 11/16/2021 | 02/08/2022 |
| US | FUELS PROGRAM | EPA Fuels Program Registered Listing | EPA | 11/15/2021 | 11/15/2021 | 02/01/2022 |
| US | FUSRAP | Formerly Utilized Sites Remedial Action Program | Department of Energy | 07/26/2021 | 07/27/2021 | 10/22/2021 |
| US | HIST FTTS | FIFRA/TSCA Tracking System Administrative Case Listing | Environmental Protection Agency | 10/19/2006 | 03/01/2007 | 04/10/2007 |
| US | HIST FTTS INSP | FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis | Environmental Protection Agency | 10/19/2006 | 03/01/2007 | 04/10/2007 |
| US | HMIRS | Hazardous Materials Information Reporting System | U.S. Department of Transportation | 12/15/2021 | 12/16/2021 | 03/10/2022 |
| US | ICIS | Integrated Compliance Information System | Environmental Protection Agency | 11/18/2016 | 11/23/2016 | 02/10/2017 |
| US | IHS OPEN DUMPS | Open Dumps on Indian Land | Department of Health & Human Serivces, Indian | 04/01/2014 | 08/06/2014 | 01/29/2015 |
| US | INDIAN LUST R1 | Leaking Underground Storage Tanks on Indian Land | EPA Region 1 | 04/28/2021 | 06/11/2021 | 09/07/2021 |
| US | INDIAN LUST R10 | Leaking Underground Storage Tanks on Indian Land | EPA Region 10 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN LUST R4 | Leaking Underground Storage Tanks on Indian Land | EPA Region 4 | 05/28/2021 | 06/22/2021 | 09/20/2021 |
| US | INDIAN LUST R5 | Leaking Underground Storage Tanks on Indian Land | EPA, Region 5 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN LUST R6 | Leaking Underground Storage Tanks on Indian Land | EPA Region 6 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN LUST R7 | Leaking Underground Storage Tanks on Indian Land | EPA Region 7 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN LUST R8 | Leaking Underground Storage Tanks on Indian Land | EPA Region 8 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN LUST R9 | Leaking Underground Storage Tanks on Indian Land | Environmental Protection Agency | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN ODI | Report on the Status of Open Dumps on Indian Lands | Environmental Protection Agency | 12/31/1998 | 12/03/2007 | 01/24/2008 |
| US | INDIAN RESERV | Indian Reservations | USGS | 12/31/2014 | 07/14/2015 | 01/10/2017 |
| US | INDIAN UST R1 | Underground Storage Tanks on Indian Land | EPA, Region 1 | 10/14/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN UST R10 | Underground Storage Tanks on Indian Land | EPA Region 10 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN UST R4 | Underground Storage Tanks on Indian Land | EPA Region 4 | 05/28/2021 | 06/22/2021 | 09/20/2021 |
| US | INDIAN UST R5 | Underground Storage Tanks on Indian Land | EPA Region 5 | 04/06/2021 | 06/11/2021 | 09/07/2021 |
| US | INDIAN UST R6 | Underground Storage Tanks on Indian Land | EPA Region 6 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN UST R7 | Underground Storage Tanks on Indian Land | EPA Region 7 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN UST R8 | Underground Storage Tanks on Indian Land | EPA Region 8 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN UST R9 | Underground Storage Tanks on Indian Land | EPA Region 9 | 10/12/2021 | 11/15/2021 | 02/08/2022 |
| US | INDIAN VCP R1 | Voluntary Cleanup Priority Listing | EPA, Region 1 | 07/27/2015 | 09/29/2015 | 02/18/2016 |
| US | INDIAN VCP R7 | Voluntary Cleanup Priority Lisitng | EPA, Region 7 | 03/20/2008 | 04/22/2008 | 05/19/2008 |
| US | LEAD SMELTER 1 | Lead Smelter Sites | Environmental Protection Agency | 01/25/2022 | 02/03/2022 | 02/22/2022 |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym | Full Name | Government Agency | Gov Date | Arvl. Date | Active Date |
|---|---|---|---|---|---|---|
| US | LEAD SMELTER 2 | Lead Smelter Sites | American Journal of Public Health | 04/05/2001 | 10/27/2010 | 12/02/2010 |
| US | LIENS 2 | CERCLA Lien Information | Environmental Protection Agency | 01/25/2022 | 02/03/2022 | 02/22/2022 |
| US | LUCIS | Land Use Control Information System | Department of the Navy | 11/15/2021 | 11/16/2021 | 02/08/2022 |
| US | MINES MRDS | Mineral Resources Data System | USGS | 04/06/2018 | 10/21/2019 | 10/24/2019 |
| US | MINES VIOLATIONS | MSHA Violation Assessment Data | DOL, Mine Safety & Health Admi | 03/21/2022 | 03/22/2022 | 03/25/2022 |
| US | MLTS | Material Licensing Tracking System | Nuclear Regulatory Commission | 07/29/2021 | 08/24/2021 | 11/19/2021 |
| US | NPL | National Priority List | EPA | 01/25/2022 | 02/03/2022 | 02/22/2022 |
| US | NPL LIENS | Federal Superfund Liens | EPA | 10/15/1991 | 02/02/1994 | 03/30/1994 |
| US | ODI | Open Dump Inventory | Environmental Protection Agency | 06/30/1985 | 08/09/2004 | 09/17/2004 |
| US | PADS | PCB Activity Database System | EPA | 01/20/2022 | 01/20/2022 | 03/25/2022 |
| US | PCB TRANSFORMER | PCB Transformer Registration Database | Environmental Protection Agency | 09/13/2019 | 11/06/2019 | 02/10/2020 |
| US | PCS | Permit Compliance System | EPA, Office of Water | 07/14/2011 | 08/05/2011 | 09/29/2011 |
| US | PCS ENF | Enforcement data | EPA | 12/31/2014 | 02/05/2015 | 03/06/2015 |
| US | PCS INACTIVE | Listing of Inactive PCS Permits | EPA | 11/05/2014 | 01/06/2015 | 05/06/2015 |
| US | PRP | Potentially Responsible Parties | EPA | 01/25/2022 | 02/03/2022 | 02/25/2022 |
| US | Proposed NPL | Proposed National Priority List Sites | EPA | 01/25/2022 | 02/03/2022 | 02/22/2022 |
| US | RAATS | RCRA Administrative Action Tracking System | EPA | 04/17/1995 | 07/03/1995 | 08/07/1995 |
| US | RADINFO | Radiation Information Database | Environmental Protection Agency | 07/01/2019 | 07/01/2019 | 09/23/2019 |
| US | RCRA NonGen / NLR | RCRA - Non Generators / No Longer Regulated | Environmental Protection Agency | 02/28/2022 | 03/02/2022 | 03/17/2022 |
| US | RCRA-LQG | RCRA - Large Quantity Generators | Environmental Protection Agency | 02/28/2022 | 03/02/2022 | 03/17/2022 |
| US | RCRA-SQG | RCRA - Small Quantity Generators | Environmental Protection Agency | 02/28/2022 | 03/02/2022 | 03/17/2022 |
| US | RCRA-TSDF | RCRA - Treatment, Storage and Disposal | Environmental Protection Agency | 02/28/2022 | 03/02/2022 | 03/17/2022 |
| US | RCRA-VSQG | RCRA - Very Small Quantity Generators (Formerly Conditionall | Environmental Protection Agency | 02/28/2022 | 03/02/2022 | 03/17/2022 |
| US | RMP | Risk Management Plans | Environmental Protection Agency | 10/20/2021 | 11/05/2021 | 11/12/2021 |
| US | ROD | Records Of Decision | EPA | 01/25/2022 | 02/03/2022 | 02/22/2022 |
| US | SCRD DRYCLEANERS | State Coalition for Remediation of Drycleaners Listing | Environmental Protection Agency | 01/01/2017 | 02/03/2017 | 04/07/2017 |
| US | SEMS | Superfund Enterprise Management System | EPA | 01/25/2022 | 02/03/2022 | 02/22/2022 |
| US | SEMS-ARCHIVE | Superfund Enterprise Management System Archive | EPA | 01/25/2022 | 02/03/2022 | 02/22/2022 |
| US | SSTS | Section 7 Tracking Systems | EPA | 10/18/2021 | 10/20/2021 | 01/10/2022 |
| US | TRIS | Toxic Chemical Release Inventory System | EPA | 12/31/2018 | 08/14/2020 | 11/04/2020 |
| US | TSCA | Toxic Substances Control Act | EPA | 12/31/2016 | 06/17/2020 | 09/10/2020 |
| US | UMTRA | Uranium Mill Tailings Sites | Department of Energy | 08/30/2019 | 11/15/2019 | 01/28/2020 |
| US | US AIRS (AFS) | Aerometric Information Retrieval System Facility Subsystem ( | EPA | 10/12/2016 | 10/26/2016 | 02/03/2017 |
| US | US AIRS MINOR | Air Facility System Data | EPA | 10/12/2016 | 10/26/2016 | 02/03/2017 |
| US | US BROWNFIELDS | A Listing of Brownfields Sites | Environmental Protection Agency | 02/23/2022 | 03/10/2022 | 03/10/2022 |
| US | US CDL | Clandestine Drug Labs | Drug Enforcement Administration | 11/16/2021 | 11/18/2021 | 02/08/2022 |
| US | US ENG CONTROLS | Engineering Controls Sites List | Environmental Protection Agency | 11/19/2021 | 11/19/2021 | 02/14/2022 |
| US | US FIN ASSUR | Financial Assurance Information | Environmental Protection Agency | 12/13/2021 | 12/17/2021 | 03/17/2022 |
| US | US HIST CDL | National Clandestine Laboratory Register | Drug Enforcement Administration | 11/16/2021 | 11/18/2021 | 02/08/2022 |
| US | US INST CONTROLS | Institutional Controls Sites List | Environmental Protection Agency | 11/19/2021 | 11/19/2021 | 02/14/2022 |
| US | US MINES | Mines Master Index File | Department of Labor, Mine Safety and Health A | 11/02/2021 | 11/22/2021 | 02/14/2022 |
| US | US MINES 2 | Ferrous and Nonferrous Metal Mines Database Listing | USGS | 05/06/2020 | 05/27/2020 | 08/13/2020 |
| US | US MINES 3 | Active Mines & Mineral Plants Database Listing | USGS | 04/14/2011 | 06/08/2011 | 09/13/2011 |
| US | UXO | Unexploded Ordnance Sites | Department of Defense | 12/31/2020 | 01/11/2022 | 02/14/2022 |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym | Full Name | Government Agency | Gov Date | Arvl. Date | Active Date |
|---|---|---|---|---|---|---|
| CT | CT MANIFEST | Hazardous Waste Manifest Data | Department of Energy & Environmental Protecti | 11/11/2021 | 11/12/2021 | 02/01/2022 |
| NJ | NJ MANIFEST | Manifest Information | Department of Environmental Protection | 12/31/2018 | 04/10/2019 | 05/16/2019 |
| NY | NY MANIFEST | Facility and Manifest Data | Department of Environmental Conservation | 01/01/2019 | 10/29/2021 | 01/19/2022 |
| PA | PA MANIFEST | Manifest Information | Department of Environmental Protection | 06/30/2018 | 07/19/2019 | 09/10/2019 |
| RI | RI MANIFEST | Manifest information | Department of Environmental Management | 12/31/2020 | 11/30/2021 | 02/18/2022 |
| WI | WI MANIFEST | Manifest Information | Department of Natural Resources | 05/31/2018 | 06/19/2019 | 09/03/2019 |
| US | AHA Hospitals | Sensitive Receptor: AHA Hospitals | American Hospital Association, Inc. | | | |
| US | Medical Centers | Sensitive Receptor: Medical Centers | Centers for Medicare & Medicaid Services | | | |
| US | Nursing Homes | Sensitive Receptor: Nursing Homes | National Institutes of Health | | | |
| US | Public Schools | Sensitive Receptor: Public Schools | National Center for Education Statistics | | | |
| US | Private Schools | Sensitive Receptor: Private Schools | National Center for Education Statistics | | | |
| FL | Daycare Centers | Sensitive Receptor: Department of Children & Families | Provider Information | | | |
| US | Flood Zones | 100-year and 500-year flood zones | Emergency Management Agency (FEMA) | | | |
| US | NWI | National Wetlands Inventory | U.S. Fish and Wildlife Service | | | |
| FL | State Wetlands | Wetlands Inventory | Department of Environmental Protection | | | |
| US | Topographic Map | | U.S. Geological Survey | | | |
| US | Oil/Gas Pipelines | | Endeavor Business Media | | | |
| US | Electric Power Transmission Line Data | | Endeavor Business Media | | | |

**STREET AND ADDRESS INFORMATION**

# GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

**TARGET PROPERTY ADDRESS**

FIU PDT
10555 WEST FLAGLER STREET
MIAMI, FL 33172

**TARGET PROPERTY COORDINATES**

| | |
|---|---|
| Latitude (North): | 25.771389 - 25ˆ 46’ 17.00’’ |
| Longitude (West): | 80.365833 - 80ˆ 21’ 57.00’’ |
| Universal Tranverse Mercator: | Zone 17 |
| UTM X (Meters): | 563590.2 |
| UTM Y (Meters): | 2850358.5 |
| Elevation: | 5 ft. above sea level |

**USGS TOPOGRAPHIC MAP**

| | |
|---|---|
| Target Property Map: | 11496323 HIALEAH, FL |
| Version Date: | 2018 |
| Northwest Map: | 11496325 HIALEAH SW, FL |
| Version Date: | 2018 |

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

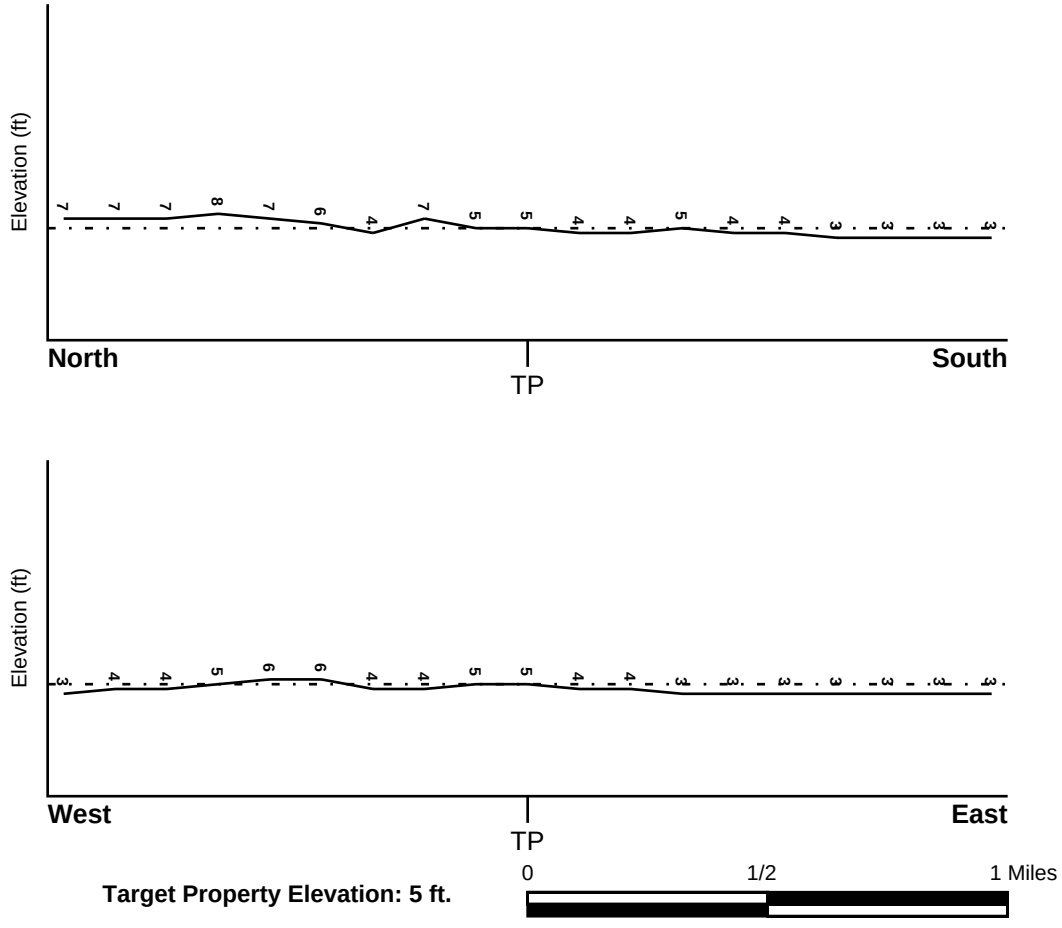
**TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

**TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General South

**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**




Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE**

| Flood Plain Panel at Target Property | FEMA Source Type |
|---|---|
| 12086C0288L | FEMA FIRM Flood data |

| Additional Panels in search area: | FEMA Source Type |
|---|---|
| 12086C0267L | FEMA FIRM Flood data |
| 12086C0286L | FEMA FIRM Flood data |
| 12086C0269L | FEMA FIRM Flood data |

**NATIONAL WETLAND INVENTORY**

| NWI Quad at Target Property | NWI Electronic Data Coverage |
|---|---|
| HIALEAH | YES - refer to the Overview Map and Detail Map |

**HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

***Site-Specific Hydrogeological Data*:***

| | |
|---|---|
| Search Radius: | 1.25 miles |
| Status: | Not found |

**AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| MAP ID | LOCATION FROM TP | GENERAL DIRECTION GROUNDWATER FLOW |
|---|---|---|
| A3 | 1/8 - 1/4 Mile SSW | NW |
| 1G | 1/8 - 1/4 Mile SSW | NW |

For additional site information, refer to Physical Setting Source Map Findings.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

**GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

**ROCK STRATIGRAPHIC UNIT**

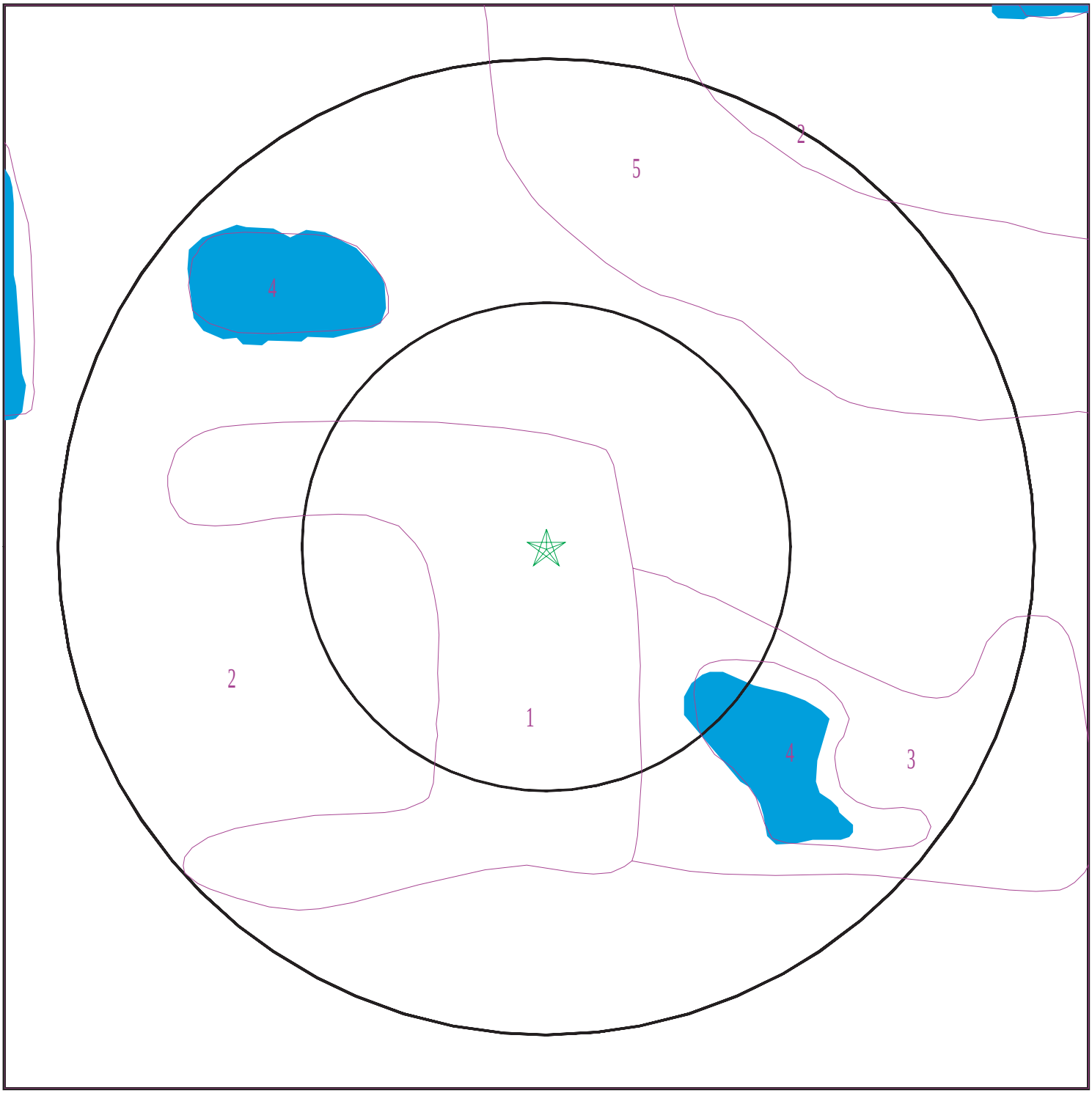
| | |
|---|---|
| Era: | Cenozoic |
| System: | Quaternary |
| Series: | Pleistocene |
| Code: | Qp *(decoded above as Era, System & Series)* |

**GEOLOGIC AGE IDENTIFICATION**

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 6931685.2s




Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

| | | | |
|---|---|---|---|
| SITE NAME: | FIU PDT | CLIENT: | Jacobs |
| ADDRESS: | 10555 West Flagler Street<br>Miami FL 33172 | CONTACT: | Christina Mcdonough |
| LAT/LONG: | 25.771389 / 80.365833 | INQUIRY #: | 6931685.2s |
| | | DATE: | April 08, 2022 9:34 am |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

---

**Soil Map ID: 1**

Soil Component Name: Hallandale

Soil Surface Texture: fine sand

Hydrologic Group: Class B/D - Drained/undrained hydrology class of soils that can be drained and are classified.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 31 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 3 inches | fine sand | Not reported | Not reported | Max: 141<br>Min: 14 | Max: Min: |
| 2 | 3 inches | 16 inches | fine sand | Not reported | Not reported | Max: 141<br>Min: 14 | Max: Min: |
| 3 | 16 inches | 16 inches | bedrock | Not reported | Not reported | Max: 141<br>Min: 14 | Max: Min: |

---

**Soil Map ID: 2**

Soil Component Name: Urban land

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 59 inches | variable | Not reported | Not reported | Max:<br>Min: | Max: Min: |

---

**Soil Map ID: 3**

Soil Component Name: Water

Soil Surface Texture: variable

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

---

**Soil Map ID: 4**

Soil Component Name: Water

Soil Surface Texture: water

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 0 inches | water | Not reported | Not reported | Max:<br>Min: | Max: Min: |

---

**Soil Map ID: 5**

Soil Component Name: Udorthents

Soil Surface Texture: cobbly sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 29 inches | cobbly sand | Not reported | Not reported | Max: 141<br>Min: 14 | Max: Min: |
| 2 | 29 inches | 50 inches | sand | Not reported | Not reported | Max: 141<br>Min: 14 | Max: Min: |
| 3 | 50 inches | 50 inches | bedrock | Not reported | Not reported | Max: 141<br>Min: 14 | Max: Min: |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

| DATABASE | SEARCH DISTANCE (miles) |
|---|---|
| Federal USGS | 1.000 |
| Federal FRDS PWS | Nearest PWS within 1 mile |
| State Database | 1.000 |

## FEDERAL USGS WELL INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| A5 | USGS40000233465 | 1/8 - 1/4 Mile SW |
| 15 | USGS40000233528 | 1/2 - 1 Mile NNE |

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| No PWS System Found | | |

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | FLSO12000005866 | 0 - 1/8 Mile South |
| 2 | FLSO12000005836 | 1/8 - 1/4 Mile West |
| A4 | FLSO12000041699 | 1/8 - 1/4 Mile South |
| 6 | FLSO12000021303 | 1/4 - 1/2 Mile SW |
| B7 | FLSO12000043270 | 1/2 - 1 Mile West |
| B8 | FLSO12000037527 | 1/2 - 1 Mile West |
| 9 | FLSO12000037526 | 1/2 - 1 Mile West |
| 10 | FLSO12000010725 | 1/2 - 1 Mile East |
| C11 | FLSO12000015039 | 1/2 - 1 Mile East |
| C12 | FLSO12000002014 | 1/2 - 1 Mile East |
| 13 | FLSO12000043727 | 1/2 - 1 Mile NNW |
| D14 | FLSO12000054729 | 1/2 - 1 Mile SW |
| D16 | FLSO12000054794 | 1/2 - 1 Mile SW |
| E17 | FLSO12000005827 | 1/2 - 1 Mile SSW |
| E18 | FLSO12000005843 | 1/2 - 1 Mile SSW |
| 19 | FLSO12000031550 | 1/2 - 1 Mile West |
| F20 | FLSO12000013738 | 1/2 - 1 Mile NE |
| F21 | FLSO12000013737 | 1/2 - 1 Mile NE |
| 22 | FLSO12000036877 | 1/2 - 1 Mile SE |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**STATE DATABASE WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| F23 | FLSO12000013736 | 1/2 - 1 Mile NE |
| F24 | FLSO12000013739 | 1/2 - 1 Mile NE |
| 25 | FLSO12000005844 | 1/2 - 1 Mile SW |

# PHYSICAL SETTING SOURCE MAP - 6931685.2s


- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells
- Sink holes

| | |
|---|---|
| SITE NAME: FIU PDT | CLIENT: Jacobs |
| ADDRESS: 10555 West Flagler Street<br>Miami FL 33172 | CONTACT: Christina Mcdonough |
| LAT/LONG: 25.771389 / 80.365833 | INQUIRY #: 6931685.2s<br>DATE: April 08, 2022 9:34 am |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

| Map ID<br>Direction<br>Distance<br>Elevation | | Database | EDR ID Number |
|---|---|---|---|
| **1**<br>**South**<br>**0 - 1/8 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000005866** |
| **2**<br>**West**<br>**1/8 - 1/4 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000005836** |
| **A3**<br>**SSW**<br>**1/8 - 1/4 Mile**<br>**Higher** | Click here for full text details | **AQUIFLOW** | **452** |
| **A4**<br>**South**<br>**1/8 - 1/4 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000041699** |
| **A5**<br>**SW**<br>**1/8 - 1/4 Mile**<br>**Higher** | Click here for full text details | **FED USGS** | **USGS40000233465** |
| **6**<br>**SW**<br>**1/4 - 1/2 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000021303** |
| **B7**<br>**West**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000043270** |
| **B8**<br>**West**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000037527** |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

| Map ID<br>Direction<br>Distance<br>Elevation | | Database | EDR ID Number |
|---|---|---|---|
| **9**<br>**West**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000037526** |
| **10**<br>**East**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000010725** |
| **C11**<br>**East**<br>**1/2 - 1 Mile**<br>**Lower** | Click here for full text details | **FL WELLS** | **FLSO12000015039** |
| **C12**<br>**East**<br>**1/2 - 1 Mile**<br>**Lower** | Click here for full text details | **FL WELLS** | **FLSO12000002014** |
| **13**<br>**NNW**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000043727** |
| **D14**<br>**SW**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000054729** |
| **15**<br>**NNE**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FED USGS** | **USGS40000233528** |
| **D16**<br>**SW**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000054794** |
| **E17**<br>**SSW**<br>**1/2 - 1 Mile**<br>**Lower** | Click here for full text details | **FL WELLS** | **FLSO12000005827** |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

| Map ID<br>Direction<br>Distance<br>Elevation | | Database | EDR ID Number |
|---|---|---|---|
| **E18**<br>**SSW**<br>**1/2 - 1 Mile**<br>**Lower** | Click here for full text details | **FL WELLS** | **FLSO12000005843** |
| **19**<br>**West**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000031550** |
| **F20**<br>**NE**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000013738** |
| **F21**<br>**NE**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000013737** |
| **22**<br>**SE**<br>**1/2 - 1 Mile**<br>**Lower** | Click here for full text details | **FL WELLS** | **FLSO12000036877** |
| **F23**<br>**NE**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000013736** |
| **F24**<br>**NE**<br>**1/2 - 1 Mile**<br>**Higher** | Click here for full text details | **FL WELLS** | **FLSO12000013739** |
| **25**<br>**SW**<br>**1/2 - 1 Mile**<br>**Lower** | Click here for full text details | **FL WELLS** | **FLSO12000005844** |
| **1G**<br>**SSW**<br>**1/8 - 1/4 Mile**<br>**Lower** | Click here for full text details | **AQUIFLOW** | **452** |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
# RADON

**AREA RADON INFORMATION**

State Database: FL Radon

Radon Test Results

| Zip | Total Buildings | % of sites>4pCi/L | Data Source |
|---|---|---|---|
| 33172 | 139 | 24.5 | Certified Residential Database |
| 33172 | 34 | 14.7 | Mandatory Non-Residential Database |

Federal EPA Radon Zone for MIAMI-DADE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for MIAMI-DADE COUNTY, FL

Number of sites tested: 156

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|---|---|---|---|---|
| Living Area | 1.020 pCi/L | 91% | 9% | 0% |
| Basement | 0.910 pCi/L | 100% | 0% | 0% |

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

## HYDROGEOLOGIC INFORMATION

AQUIFLOW$^{R}$ Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## OTHER STATE DATABASE INFORMATION

Public Water System (PWS) Wells (Non-Federal)
Department of Environmental Protection
Telephone: 850-245-8629
Statewide coverage of PWS Wells, excluding Federally owned facilities.

Well Construction Permitting Database
Source: Northwest Florida Water Management District
Telephone: 850-539-5999

Consumptive Use Permit Well Database
Source: St. Johns River Water Management District
Telephone: 386-329-4841

DEP GWIS - Generalized Water Information System Well Data
Source: Department of Environmental Protection
Telephone: 850-245-8507
Data collected for the Watershed Monitoring Section of the Department of Environmental Protection.

DOH and DEP Historic Study of Private Wells
Source: Department of Environmental Protection
Telephone: 850-559-0901
Historic database for private supply wells.

Permitted Well Location Database
Source: South Florida Water Management District
Telephone: 561-682-6877

Super Act Program Well Data
Source: Department of Health
Telephone: 850-245-4250
This table consists of data relating to all privately and publicly owned potable wells investigated as part of the SUPER Act program. The Florida Department of Health's SUPER Act Program (per Chapter 376.3071(4)(g), Florida Statutes), was given authority to provide field and laboratory services, toxicological risk assessments, investigations of drinking water contamination complaints and education of the public.

Water Well Location Information
Source: Suwannee River Water Management District
Telephone: 386-796-7211

Water Well Permit Database
Source: Southwest Water Management District
Telephone: 352-796-7211

Oil and Gas Permit Database
Source: Department of Environmental Protection
Telephone: 850-245-3194
Locations of all permitted wells in the state of Florida.



Florida Sinkholes

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

RADON

State Database: FL Radon
Source: Department of Health
Telephone: 850-245-4288
Zip Code Based Radon Data

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

**STREET AND ADDRESS INFORMATION**

# Appendix D
# Cultural Correspondence

Section 508 Accessibility Note: If you need additional assistance, please email us at engineering@nsf.gov.

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National Science Foundation
Directorate for Engineering

**Mr. Timothy Parsons, Ph.D.**
**State Historic Preservation Officer**
Director, Division of Historical Resources
500 South Bronough Street
R.A. Gray Building, Room 305
Tallahassee, FL 32399-0250
[C/O CompliancePermits@dos.myflorida.com]

**Subject: Section 106 consultation for NSF's proposed funding of a testbed building at Florida International University**

Dear Mr. Parsons,

The National Science Foundation (NSF) seeks to consult with the Florida State Historic Preservation Officer (SHPO) as it considers providing approval to Florida International University (FIU) to use federal funds to construct a physical design testbed (testbed) at their campus in Miami, an undertaking, in accordance with 36 C.F.R. 800.3 of the regulations of the Advisory Council on Historic Preservation.

The proposed testbed would be constructed north of the existing Wall of Wind on FIU's campus in Miami, Florida (see Figure 1). It would consist of an 8,500-square-foot light industrial (Class 1) building approximately 170 feet in length and 50 feet in width. The building would include skylights and ventilators, 660 square feet of air-conditioned interior office space, and two bathrooms. As the science needs are further developed and the design is refined, it is possible the facility design may have a slightly smaller footprint. The overall purpose of the testbed is to inform the design of a National Full-scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge, and Wave Events (NICHE); the design effort for this has been funded by NSF via a Mid-Scale Research Infrastructure-1 award. NICHE will "provide a unique, national-scale, multi-user facility to experimentally test the impact of extreme winds combined with storm surge and wave actions on different types of civil infrastructure." The testbed would inform this design work and would contain either wind or wind and wave generating instruments.

### *Area of Potential Effects*

We have identified the Area of Potential Effect (APE) for this proposed testbed as the area within the vicinity of the proposed testbed , which encompasses the proposed footprint of the testbed as well as any construction staging areas and utility work (see Figure 2). This area is a conservative estimate, since design drawings have not yet been developed for the testbed and the exact positioning of the testbed within this area is not yet defined; the actual area of direct ground disturbance would be much smaller than the approximately 2.1-acre area depicted.

## *Basis for Determining No Historic Properties Affected*

FIU facilities staff, with experience in constructing projects in the area, indicated that they have not encountered historic properties during construction. To further identify any potential historic properties within the APE, we researched and contacted the following sources: the Florida Master Site File and the National Register of Historic Places.

The National Register of Historic Places contains 76 properties within Miami, Dade County, with no properties located within or near to the APE. The Florida Master Site File shows no historic properties located within the APE, and one unevaluated archaeological site located within a mile radius of the proposed testbed. Based on supplemental records provided by the Florida Master Site File, this archaeological site was documented as a prehistoric sand burial mound. The Florida Master Site Files are enclosed as a nonpublic attachment and include a figure that shows the proposed project location (marked as 10555 West Flagler Street) in relation to the archaeological site (marked as a DA number).

Based on the above, we have made a preliminary finding of **"No Historic Properties Affected,"** pursuant to 36 CFR 800.4(d)(1). We have not identified any known historic properties within the APE and, based on the above review, it appears that there is a low potential for archaeological resources to occur within the 170-by-50-foot footprint of the proposed testbed.

Concurrent with this letter, NSF is providing a notification of the project to the Miccosukee Tribe of Indians of Florida. If the Tribe is interested in consulting with NSF and identifies any potential historic properties within the APE, NSF will update

this consultation accordingly and continue to consult with your office on potential effects.

***Conclusion***

NSF is providing your office with the opportunity to respond to our proposed APE and our preliminary finding, in accordance with 36 CFR §800.4(d)(1)(i). If you concur, please let us know in writing, or sign on the line below and return a copy of this letter by email to Ms. Kristen Hamilton, at krihamil@nsf.gov.

We appreciate your review and attention to this matter.

Sincerely,

Joy Pauschke

Joy Pauschke, Ph.D., P.E.
Program Director
Division of Civil, Mechanical and Manufacturing Innovation (CMMI)
Directorate for Engineering (ENG)
National Science Foundation

Attachments:

1) Florida Master Site Files (nonpublic)

Concurrence:

_____

State Historic Preservation Officer Date

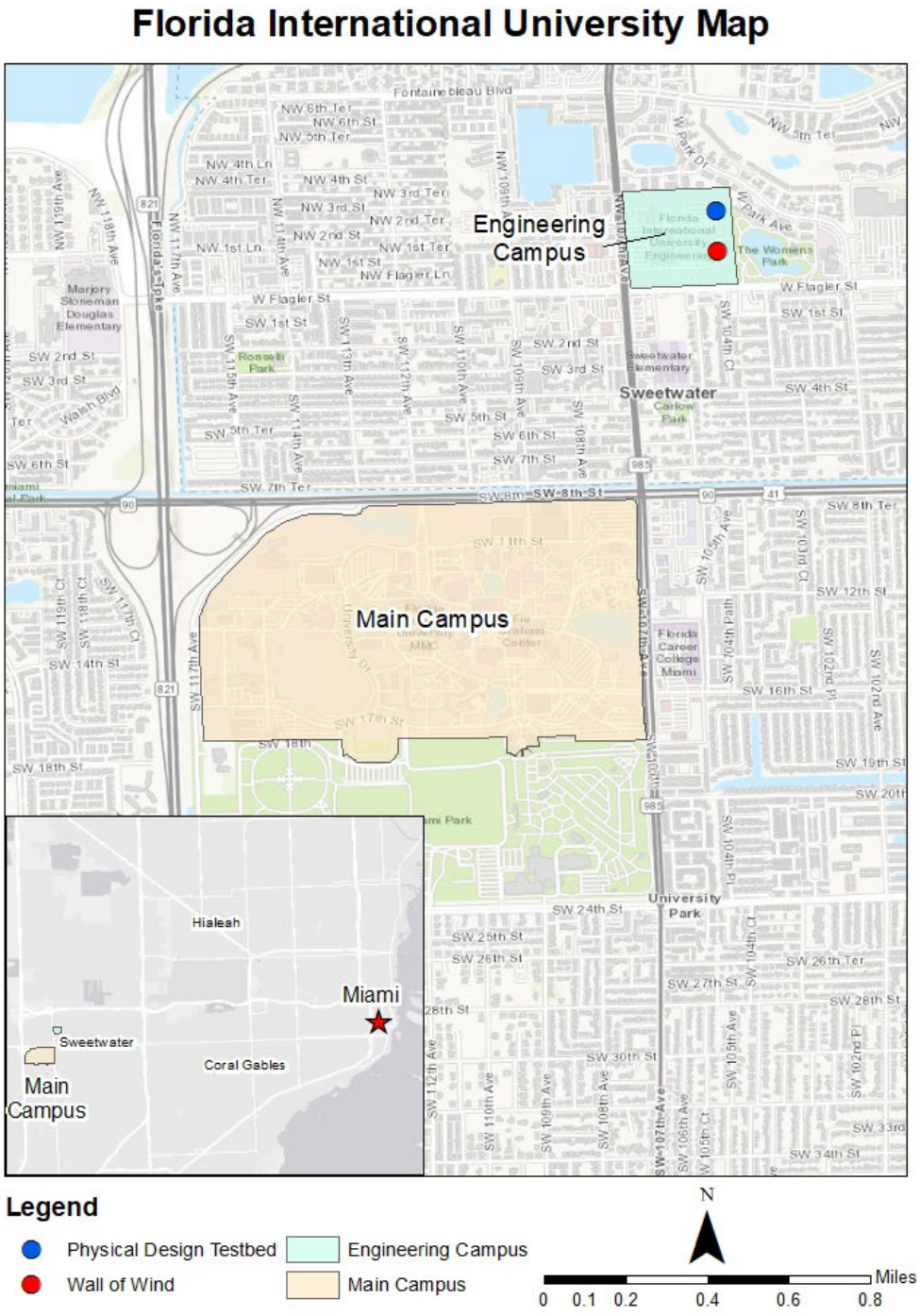


**Figure 1. Location of Florida International University Main and Engineering Campus (figure prepared for NSF by Jacobs Engineering)**

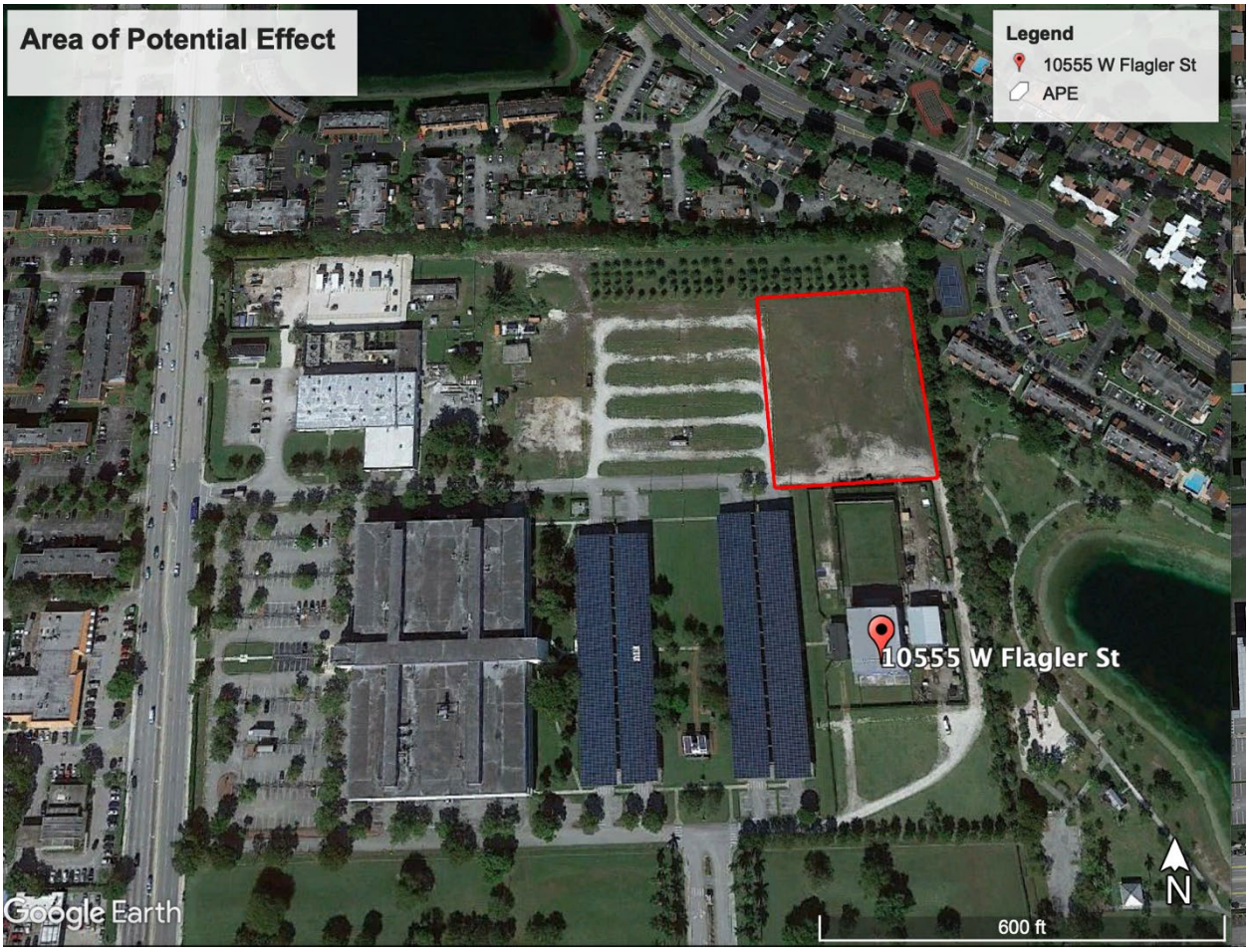


**Figure 2. Area of Potential Effects, marked in red; this encompasses an area of approximately 92,000 square feet (approximately 2.1 acres) within which the 8,500 square foot test bed would be located.**

FLORIDA DEPARTMENT of STATE

**RON DESANTIS**
Governor

**CORD BYRD**
Secretary of State

Kristen Hamil
Environmental Compliance Officer
National Science Foundation
2415 Eisenhower Avenue
Alexandria, Virginia 22314

May 19, 2022

RE: DHR Project File No.: 2022-2815
Project: *Testbed Building Florida International University, Wall of Wind*
County: Dade

Ms. Hamil:

The Florida State Historic Preservation Officer reviewed the referenced project for possible effects on historic properties listed, or eligible for listing, in the *National Register of Historic Places.* The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, and its implementing regulations in *36 CFR Part 800: Protection of Historic Properties.*

It is the opinion of this office that the proposed project will have no effect on historic properties. However, due to ground disturbing activities, the following special condition regarding unexpected discoveries should be included during project activities:

- If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, *Florida Statutes*.

If you have any questions, please contact Alayna Gould, Historic Preservationist, by email at *Alayna.Gould@dos.myflorida.com*, or by telephone at 850-245-6343.

Sincerely,


Timothy A Parsons, Ph.D.
Director, Division of Historical Resources
& State Historic Preservation Officer

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# Appendix E
# NICHE Fan Features

Section 508 Accessibility Note: If you need additional assistance, please email us at engineering@nsf.gov.

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Paul Vasilescu
Aerolab

March 15, 2022

Re: Proposed Fan Technologies for NICHE

Aerolab will design, optimize, and fabricate a custom fan system for the NICHE based on existing technologies incorporated into previous Aerolab wind tunnel projects including the new Wright Brothers Wind Tunnel at MIT.

The proposed wind tunnel fan uses a variety of features to reduce audible noise. Aeroacoustic noise emissions can be reduced by:

A) Reducing acoustic energy being generated by the noise sources
B) Absorbing or dampening noise that is being generated

Aerolab's approach utilizes both techniques in the proposed system with a strong emphasis on reducing acoustic energy generated by the fan.

The following features are included in the baseline fan:

- *Relatively low tip speed Mach number* – This feature has the single largest impact on noise. The theoretically optimal place to be is around Mach 0.3. Our baseline fan has a tip speed Mach number of ~0.27 at 120 MPH and ~0.45 at 200 MPH. Design space exists to further optimize the system to bring tip speed Mach number down further for the top end speed. Aerolab will conduct these during the contracted effort.
- *Uniform pressure rise* – This feature improves both noise and flow quality. The fan further has an optimized twist and chord distribution along the span to minimize span wise non-uniformities.
- *Optimal number of rotor blades and stator vanes* - The fan disk utilizes a relatively large number of rotor blades (17). The number of rotor blades (17) and the number of stator vanes (7) are both prime numbers which research and experiment have shown reduce aeroacoustic noise when appropriately chosen. The number of rotor blades and stator vanes combined with the operating RPM further define the blade pass frequency and harmonics of the system.
- *Stator sweep and lean* – These features substantially reduce the severity of the rotor wake interaction with the stator vane.
- *Boundary Layer Ingestion* – The blade tips include a reversed flare feature at the tip in order to increase the effective work being performed by the blades near the duct wall where the boundary layer is naturally its thickest and local velocity the slowest. The net effect is an improvement of streamwise velocity uniformity downstream of the fan, reduction in boundary layer thickness, and improvement in efficiency, which translates into a reduction of aeroacoustic noise.

A CAD rendering of the MIT fan system designed and built by Aerolab is provided in Fig 1 below. Photos of the same MIT fan is provided in Fig 2 and 3 below.

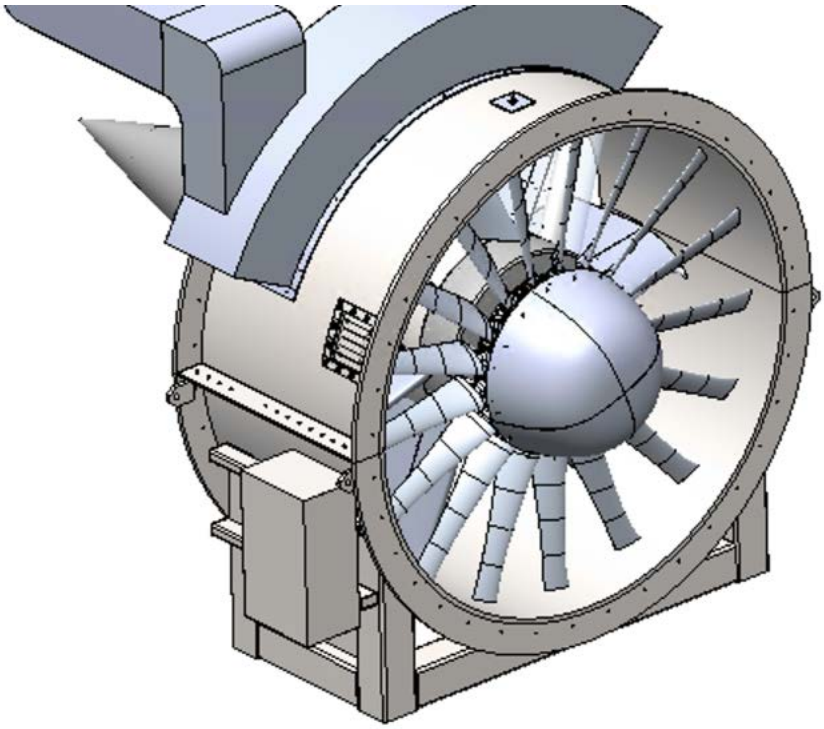

*Figure 1: Aerolab MIT Fan CAD Rendering*

*Figure 2: Aerolab MIT Fan During Assembly*

*Figure 3: Aerolab MIT Fan*

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# Appendix F
# Floodplain Management Compliance

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# Appendix F. Compliance of Proposed Physical Design Testbed at Florida International University with Executive Order 11988, "Floodplain Management"

The National Science Foundation (NSF), in consultation with the Florida International University (FIU), has prepared an environmental assessment (EA) to evaluate the potential effects of NSF's proposed funding of the construction and operation of a Physical Design Testbed (PDT) on the FIU campus in Miami, Florida. The Proposed Action is for NSF to authorize the use of NSF-awarded funds for the construction and operation of the 8,500 square foot PDT facility north of the existing Wall of Wind facility at FIU's Engineering Campus. The PDT would experimentally test the impact of large hurricane events, using extreme winds combined with storm surge and wave actions on different types of civil infrastructure. If constructed, the PDT would inform, test, and prove the design of an eventual National Full-scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge, and Wave Events (NICHE). The Proposed Action is in compliance with Executive Order (EO) 11988, "Floodplain Management," as documented by the following 8-step process:

- **Step 1: Determine if a Proposed Action (project) is in the floodplain**. As shown in the FEMA Flood Insurance Rate Map (FIRM) Number 12086C0288L (FEMA, 2009), the Project Area is within the FEMA 100-year floodzone (AH).
- **Step 2: Conduct early public review, including public notice**. Public notice (refer to Attachment 1) is provided along with the EA public notice on NSF's website (www.nsf.gov/eng/infrastructure/environmental-assessment) and published in the following three newspapers: *The Miami Herald*, *El Nuevo Herald*, and *Miami Today*. Hard copies of the EA were made available to the public at the following three libraries: Steve and Dorothea Green Library, Fairlawn Branch Library, and International Mall Branch Library.
- **Step 3: Identify and evaluate practicable alternatives to locating in the floodplain**. The majority of FIU's campus is located within the 100-year floodplain and there are no practicable locations outside the floodplain, as there is limited undeveloped space for a new development of this size on FIU's property. The PDT is ideally situated adjacent to the current Wall of Wind Experimental facility, which would allow shared use of the debris field and other buffer areas. The No Action Alternative would not meet the need to provide a unique, national-scale, multi-user facility to experimentally test the impact of extreme winds combined with storm surge and wave actions on different types of civil infrastructure.
- **Step 4: Identify impacts of the Proposed Action (project)**. The design of the stormwater management system for the PDT would ensure that there would be no significant impact to regulated floodplains.
- **Step 5: Minimize threats to life, property and to natural and beneficial floodplain values, and restore and preserve natural and beneficial floodplain values.** The PDT site would be graded to meet the minimum base flood elevations. The stormwater management system at the Engineering Campus would be upgraded to compensate for the PDT's increase in impervious area and the net loss in floodplain storage volume as determined by the South Florida Water Resource Management District Environmental Resource Permitting process.
- **Step 6: Reevaluate alternatives**. No practicable alternatives have been identified.
- **Step 7: Present the findings and a public explanation**. The floodplains statement of findings will be incorporated into the Finding of No Significant Impact (FONSI). The FONSI will be published on NSF's website (www.nsf.gov/eng/infrastructure/environmental-assessment).
- **Step 8: Implement the Proposed Action (project).** If the Proposed Action is implemented, FIU would have continuing responsibility to maintain the stormwater management system to remain in compliance with EO 11988.

## References

Federal Emergency Management Agency (FEMA). 2009. FEMA Flood Map Service Center: Search By Address: FUI. "Miami-Dade County Unincorporated Areas, Map Number 12086C0288L." September 11. https://msc.fema.gov/portal/search?AddressQuery=FIU#searchresultsanchor

# Attachment 1
# Public Notice

Public Advertisement

The National Science Foundation (NSF), in consultation with the Florida International University (FIU), has prepared an Environmental Assessment (EA) to evaluate the potential effects of NSF's authorization of the use of NSF-awarded funds for the construction and operation of a Physical Design Testbed (PDT) on the FIU campus in Miami, Florida.

The 8,500-square-foot PDT would experimentally test the impact of large hurricane events using extreme winds combined with storm surge and wave actions on different types of civil infrastructure. If constructed, the PDT would inform, test, and prove the design of an eventual National Full-scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge, and Wave Events (NICHE).

The public is invited to review and comment on the EA during a minimum 30-day comment period from July 29, 2022 through August 31, 2022. The PDT is proposed to be constructed within the Federal Emergency Management Agency 100-year floodplain and will comply with Executive Order 11988, "Floodplain Management." Comments should be emailed to Joy Pauschke, Ph.D., P.E., National Science Foundation, Division of Civil, Mechanical and Manufacturing Innovation, at engineering@nsf.gov.

The EA is posted to the NSF website www.nsf.gov/eng/infrastructure/environmental-assessment. Hard copies of the EA may be viewed at the following locations:

1. Steve and Dorothea Green Library, 11200 SW 8th Street, Miami, FL 33199; (305) 348-2451
2. Fairlawn Branch Library, 6376 SW 8th Street, Miami, FL 33144; (305) 261-1571
3. International Mall Branch Library, 10315 NW 12 Street, Doral, FL 33172; (305) 594-2514

Substantive comments will be addressed as appropriate in the final environmental review document(s), which will be posted to the above website.

# Appendix G
# Coastal Zone Management Act Documentation

Section 508 Accessibility Note: If you need additional assistance, please email us at engineering@nsf.gov.

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**Subject:** [EXTERNAL] - The Florida State Clearinghouse has received your electronic submiAal
**Date:** Tuesday, June 21, 2022 at 3:07:28 PM Eastern Daylight Time
**From:** State_Clearinghouse
**To:** Hamilton, Kristen



The Florida State Clearinghouse has received your electronic submiAal.

If you have any quesRons, please contact the Clearinghouse Coordinator at (850) 717-9076.

Thank you.

Kae Craig
Office of Intergovernmental Programs
Florida Dept. Environmental ProtecRon
ph: 850-717-9045

Dep Customer Survey

National Science Foundation

June 21, 2022

Chris Stahl
Clearinghouse Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Boulevard, M.S. 47
Tallahassee, Florida 32399-3000

**Subject: Federal Agency Coastal Zone Management Act (CZMA) Negative Determination**

Dear Mr. Stahl:

This letter provides the State of Florida with the National Science Foundation's (NSF's) Negative Determination under Section 307 of the CZMA, 16 *United States Code* Section 1456, and Title 15 *Code of Federal Regulations* (CFR) Section 930.35. The information in this Negative Determination is also provided pursuant to 15 CFR Section 930.35.

**Overview**

NSF has prepared an Environmental Assessment (EA), in consultation with Florida International University (FIU), to evaluate the potential environmental effects of NSF's proposed funding of the construction and operation of a Physical Design Testbed (PDT) on the FIU campus in Miami, Florida. FIU would construct a PDT to experimentally simulate the impact of large hurricane events using extreme winds combined with storm surge and wave actions on different types of civil infrastructure. The proposed infrastructure would consist of an 8,500-square-foot light industrial building approximately 170 feet in length and 50 feet in width. NSF is the lead federal agency for this action.

Equipment inside the PDT would include a fan system for wind speeds up to 213 mph and a 12-foot-wide by 9-foot-high fiberglass reinforced plastic (FRP) water channel. Electricity for the facility would be provided by Florida Power and Light (FPL); generators or other diesel-powered equipment would not be needed. Water and sewer for the facility would be provided by Miami Dade Water and Sewer Department (MDWASD) and storage tanks would be used to facilitate water recycling as much as possible. The FIU engineering campus has sufficient parking for the expected users of the proposed PDT facility. Site access would be controlled by use of a security fence. The building would also include skylights and ventilators, 660 square feet of air-conditioned interior office space, and two bathrooms.

FIU may determine that the wave simulations could be conducted in a facility at another university and the PDT at FIU would then be de-scoped to contain only wind simulation equipment and would have a smaller footprint.

**Purpose and Need**

In December 2021, NSF issued a Mid-scale Research Infrastructure-1 award to FIU to support the design of a National Full-scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge, and Wave Events (NICHE). To aid the design of the full-scale NICHE, FIU intends to seek NSF's approval to use NICHE funds to construct a prototype smaller-scale PDT. The purpose of the PDT is to inform the design of NICHE by providing proof-of-concept and validation of empirical models. The PDT is needed to test and prove a subset of eventual full-scale NICHE equipment, demonstrate the physics of full-scale NICHE conditions, and answer key scientific, technical, and operational questions relating to the feasibility of a full-scale NICHE.

**Federal Review**

After review of the Florida Coastal Management Program and its enforceable policies, NSF decided that this activity would not have an effect on the state of Florida coastal zone or its resources. See the attached table for an explanation of this determination.

Should you have any questions please feel free to contact me at krihamil@nsf.gov.

Sincerely,

Kristen Hamilton

Kristen Hamilton
Environmental Compliance Officer
Office of the General Counsel
National Science Foundation
2415 Eisenhower Avenue
Alexandria, VA 22314

Enclosures:

Figure 1. Proposed Physical Testbed Location

Table 1 Florida Coastal Management Program Consistency Review

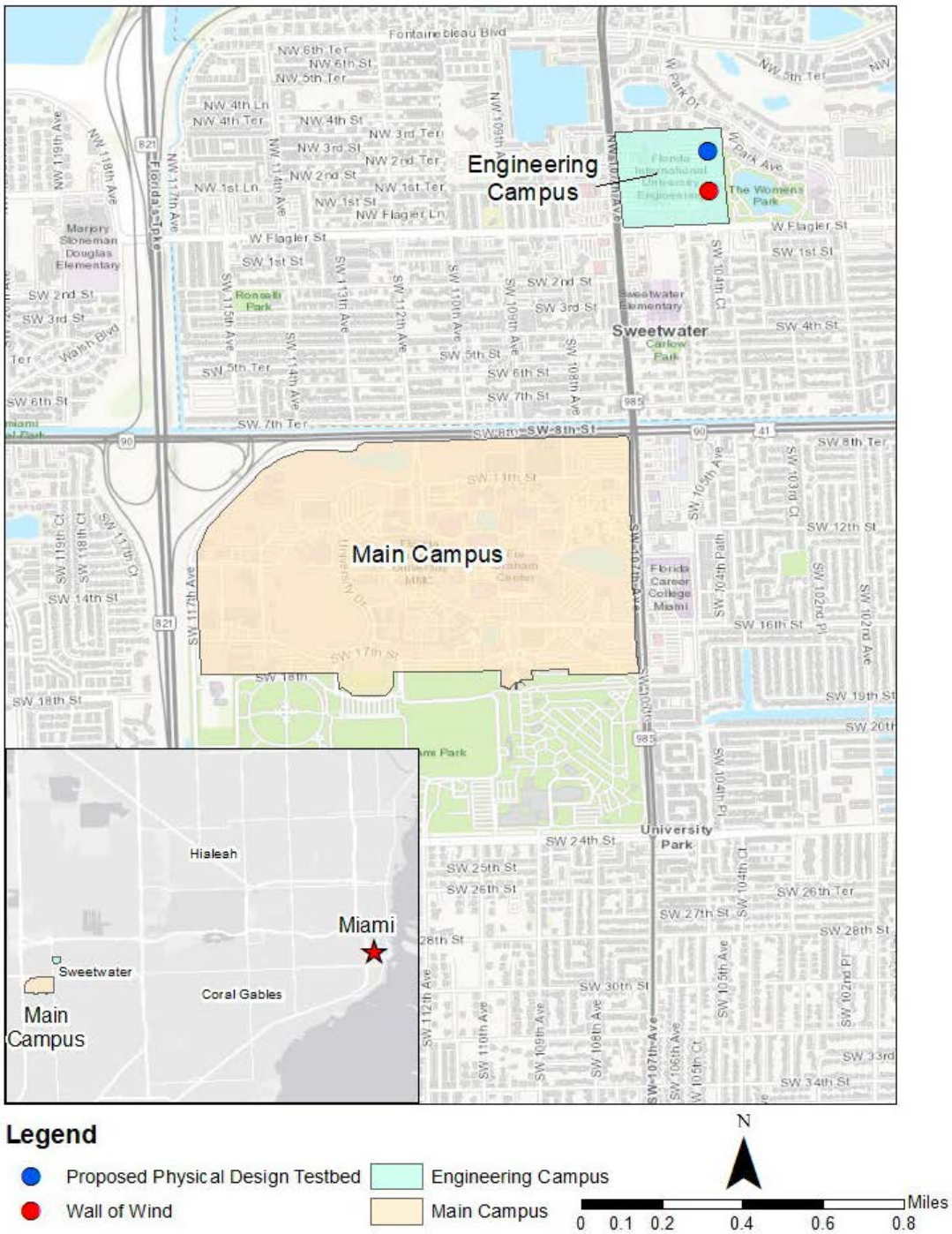


FIGURE 1. Location of Florida International University Main and Engineering Campus and Proposed Physical Design Testbed

TABLE 1
**Florida Coastal Management Program Consistency Review**
*Environmental Assessment for the Proposed Physical Design Testbed at Florida International University Miami, Florida*

| Statute | Consistency | Scope |
|---|---|---|
| Chapter 161 *Beach and Shore Preservation* | The Proposed Action would not involve construction on State beaches and would not adversely affect beach and shore management. | Authorizes the Bureau of Beaches and Coastal Systems within DEP to regulate construction on, or seaward of, the state's beaches. |
| Chapter 163 *Part II Growth Policy; County and Municipal Planning; Land Development Regulation* | The Proposed Action would not impede the local government's planning efforts. The proposed funding would provide for a research facility that would be co-located with existing academic buildings on FIU's Engineering Campus. FIU's Master Plan is currently going through a revision and would incorporate the Proposed Action. | Requires local governments to prepare, adopt, and implement comprehensive plans that encourage the most appropriate use of land and natural resources in a manner consistent with the public interest. |
| Chapter 186 *State and Regional Planning* | The Proposed Action would not impede state- or regional-level planning efforts. The proposed funding would provide for a research facility that would be co-located with existing academic buildings on FIU's Engineering Campus. FIU's Master Plan is currently going through a revision and would incorporate the Proposed Action. | Details state-level planning efforts. Requires the development of special statewide plans governing water use, land development, and transportation. |
| Chapter 252 *Emergency Management* | The Proposed Action would not increase the state's vulnerability to natural disasters. Emergency response and evacuation procedures would not be impacted by the Proposed Action. The Proposed Action would support research on the impact of hurricane events on different types of civil infrastructure. | Provides for planning and implementation of the state's response to, efforts to recover from, and the mitigation of natural and man-made disasters. |
| Chapter 253 *State Lands* | The project site is within the FIU's Engineering Campus. The FIU campus land is leased to FIU by the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (Lease No. 2727). The proposed project is consistent with FIU's use of State Lands. | Addresses the state's administration of public lands and property of this state, and provides direction regarding the acquisition, disposal, and management of all state lands. |
| Chapter 258 *State Parks and Preserves* | The Proposed Action would not affect state parks and aquatic preserves. | Addresses administration and management of state parks and preserves. |
| Chapter 259 *Land Acquisition for Conservation or Recreation* | The project does not involve the acquisition of property. | Authorizes acquisition of environmentally endangered lands and outdoor recreation lands. |
| Chapter 260 *Florida Greenways and Trails Act* | The Proposed Action does not involve the use or creation of recreational trails and would not impact existing trails. | Authorizes acquisition of land to create a recreational trails system and to facilitate management of the system. |
| Chapter 267 *Historical Resources* | The Florida State Historic Preservation Office determined the Proposed Action would have no effect on cultural resources listed, or eligible for listing, in the National Register of Historic Places (DHR Project File No.: 2022-2815). | Addresses management and preservation of the state's archaeological and historical resources |

TABLE 1
**Florida Coastal Management Program Consistency Review**
*Environmental Assessment for the Proposed Physical Design Testbed at Florida International University Miami, Florida*

| Statute | Consistency | Scope |
|---|---|---|
| Chapter 288 *Commercial Development and Capital Improvements* | The Proposed Action would not affect future business opportunities on state lands, or the promotion of tourism in the region. | Provides the framework for promoting and developing the general business, trade, and tourism components of the state economy. |
| Chapter 334 *Transportation Administration* | The Proposed Action would not have an effect on transportation. | Addresses the state's policy concerning transportation administration. |
| Chapter 339 *Transportation Finance and Planning* | The Proposed Action would not have an effect on the finance and planning needs of the state's system. | Addresses the finance and planning needs of the state's transportation system. |
| Chapter 373 *Water Resources* | Wetlands would not be disturbed, as there are no wetlands within the footprint of the proposed action. The design of the facility would include stormwater retention and treatment to offset the increase in stormwater runoff from the increase in impervious area under the Environmental Resource Permitting process in accordance with the water quality requirements of the South Dade County Division of Environmental Resources Management. The Proposed Action is located within Zone AH according to Federal Emergency Management Agency (FEMA) flood insurance rate map 12086C0288L. The Proposed Action is in compliance with Executive Order 11988, "Floodplain Management." | Addresses the state's policy concerning water resources. |
| Chapter 375 *Multipurpose Outdoor Recreation; Land Acquisition, Management, and Conservation* | Opportunities for recreation on state lands will not be affected by the Proposed Action. | Develops comprehensive multipurpose outdoor recreation plan to document recreational supply and demand, describe current recreational opportunities, estimate need for additional recreational opportunities. |
| Chapter 376 *Pollutant Discharge Prevention and Removal* | Solid waste generated by the proposed facility would be similar to that generated by the existing facilities on campus and will be handled under FIU's waste disposal contract. | Regulates transfer, storage, and transportation of pollutants, and cleanup of pollutant discharges. |
| Chapter 377 *Energy Resource* | The proposed facility would tie into FIU's existing utility systems for electric power, including renewable energy; water; sewage treatment; and stormwater management. Construction and operation of the PDT is not expected to impact the capacity of the local major service providers (Florida Power and Light or Miami Dade Water and Sewer Department). | Addresses regulation, planning, and development of energy resources of the state. |
| Chapter 379 *Fish and Wildlife Conservation* | The facility that NSF would fund under the Proposed Action would be located within a developed urban area and there will be no impact to wildlife resources. | Addresses the management of the wildlife resources of the state. |

TABLE 1
**Florida Coastal Management Program Consistency Review**
*Environmental Assessment for the Proposed Physical Design Testbed at Florida International University Miami, Florida*

| Statute | Consistency | Scope |
|---|---|---|
| Chapter 380 *Land and Water Management* | The facility that NSF would fund under the Proposed Action would be designed to meet water quality standards in order to secure the necessary regulatory permits. | Establishes land and water management policies to guide and coordinate local decisions relating to growth and development. |
| Chapter 381 *Public Health, General Provisions* | The Proposed Action would not affect public health facilities. | Establishes public policy concerning the state's public health system. |
| Chapter 388 *Mosquito Control* | The Proposed Action would not affect ecological systems and water quality of state waters regarding mosquito control. | Establishes public policy concerning environmental control in the state. |
| Chapter 553 *Building and Construction Standards* | Impacts to soils would not be significant. The proposed project involves a relatively small area and erosion control measures would keep water and sediments from moving offsite and impacting other areas. | Provides for the control and prevention of soil erosion, and for the prevention of floodwater and sediment damages. |
| Chapter 597 *Aquaculture* | The Proposed Action would not affect aquaculture efforts. | Enhance the growth of aquaculture, while protecting Florida's environment. |

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# Attachment 3
# Newspaper Notice Affidavits

Section 508 Accessibility Note: If you need additional assistance, please email us at engineering@nsf.gov.

Finding of No Significant Impact for the Proposed Physical Design Testbed at Florida International University
Miami, Florida

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# MIAMI TODAY

**2000 S. Dixie Highway, Suite 105A, Miami, FL 33133 (305) 358-2663**

Published Weekly
Miami, Miami-Dade County, Florida

STATE OF FLORIDA
COUNTY OF MIAMI DADE:

Before the undersigned authority personally appeared:
**Diana Uribe**

Who on oath says that he/she is:

**Accounting Director**
of Miami Today, a weekly newspaper published at Miami in Miami-Dade County, Florida; that the attached copy of a notice of publication:

**PUBLIC NOTICE:**
**The National Science Foundation in consultation with the Florida International University, prepared an (EA)**

Was published in said newspaper in the issue(s) of:

**August 4, 2022**

Affidavit further says that the said Miami Today is a Newspaper published at Miami, in the said Miami-Dade County, Florida and that the said newspaper has heretofore been continuously published in Miami-Dade County, Florida each week and has been entered as second-class mail matter at the post office in Miami, in the said Miami-Dade County, Florida for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate or commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Diana Uribe, Accounting Director

Notary

Sworn to and subscribed before me this
4th day of August 2022

**Public Notice**

The National Science Foundation (NSF), in consultation with the Florida International University (FIU), has prepared an Environmental Assessment (EA) to evaluate the potential effects of NSF's authorization of the use of NSF-awarded funds for the construction and operation of a Physical Design Testbed (PDT) on the FIU campus in Miami, Florida.

The 8,500-square-foot PDT would experimentally test the impact of large hurricane events using extreme winds combined with storm surge and wave actions on different types of civil infrastructure. If constructed, the PDT would inform, test, and prove the design of an eventual National Full-scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge, and Wave Events (NICHE).

The public is invited to review and comment on the EA during a minimum 30-day comment period from July 29, 2022 through August 31, 2022. The PDT is proposed to be constructed within the Federal Emergency Management Agency 100-year floodplain and will comply with Executive Order 11988, "Floodplain Management." Comments should be emailed to Joy Pauschke, Ph.D., P.E., National Science Foundation, Division of Civil, Mechanical and Manufacturing Innovation, at engineering@nsf.gov.

The EA is posted to the NSF website https://www.nsf.gov/eng/research-infrastructure/environmental-assessment.jsp. Hard copies of the EA may be viewed at the following locations:

1. Steve and Dorothea Green Library, 11200 SW 8th Street, Miami, FL 33199; (305) 348-2451
2. Fairlawn Branch Library, 6376 SW 8th Street, Miami, FL 33144; (305) 261-1571
3. International Mall Branch Library, 10315 NW 12 Street, Doral, FL 33172; (305) 594-2514

Substantive comments will be addressed as appropriate in the final environmental review document(s), which will be posted to the above website.

ANGELA LEE
NOTARY PUBLIC
MY COMMISSION EXPIRES 7-25-2026
STATE OF FLORIDA
COMMISSION NUMBER HH 252511

McClatchy

Beaufort Gazette
Belleville News-Democrat
Bellingham Herald
Bradenton Herald
Centre Daily Times
Charlotte Observer
Columbus Ledger-Enquirer
Fresno Bee
The Herald - Rock Hill
Herald Sun - Durham
Idaho Statesman
Island Packet
Kansas City Star
Lexington Herald-Leader
Merced Sun-Star
Miami Herald
el Nuevo Herald - Miami
Modesto Bee
Raleigh News & Observer
The Olympian
Sacramento Bee
Fort Worth Star-Telegram
The State - Columbia
Sun Herald - Biloxi
Sun News - Myrtle Beach
The News Tribune Tacoma
The Telegraph - Macon
San Luis Obispo Tribune
Tri-City Herald
Wichita Eagle

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| 103114 | 296277 | MIA Herald Local | | $1,349.40 | 3 | 4.00 in |

**Attention:** Christina McDonough

Jacobs Water Resources Engineer
555 Tech Center Drive, Suite 210
Colorado Springs, Colorado 80919

## Public Advertisement

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3. International Mall Branch Library, 10315 NW 12 Street, Doral, FL 33172; (305) 594-2514

Substantive comments will be addressed as appropriate in the final environmental review document(s), which will be posted to the above website.

**PUBLISHED DAILY**
**MIAMI-DADE-FLORIDA**

**STATE OF FLORIDA**
**COUNTY OF MIAMI-DADE**

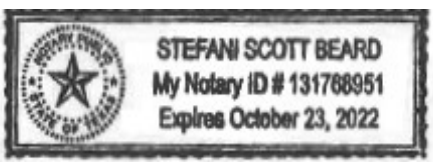
Before the undersigned authority personally appeared: Amanda Grisham, who on oath says that he/she is CUSTODIAN OF RECORDS of The Miami Herald, a daily newspaper published at Miami in Miami-Dade County, Florida; that the attached copy of the advertisement that was published was published in said newspaper in the issue(s) of:
Publication: Miami Herald

No. of Insertions: 1
Beginning Issue of: 07/31/2022
Ending Issue of: 07/31/2022

Affiant further says that the said Miami Herald is a newspaper published at Miami, in the said Miami-Dade County, Florida and that the said newspaper has heretofore been continuously published in said Dade County, Florida each day and has been entered a second class mail matter at the post office in Miami, in said Miami-Dade County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid or promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper(s).

Sworn to and subscribed before me this 28th day of July in the year of 2022

Notary Public in and for the state of Texas, residing in Dallas County

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McClatchy

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Belleville News-Democrat
Bellingham Herald
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Centre Daily Times
Charlotte Observer
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Idaho Statesman
Island Packet
Kansas City Star
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Miami Herald
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| 103114 | 296277 | MIA Herald Local | | $528.84 | 3 | 4.00 in |

**Attention:** Christina McDonough

Jacobs Water Resources Engineer
555 Tech Center Drive, Suite 210
Colorado Springs, Colorado 80919

**Anuncio Público**

La Fundación Nacional de las Ciencias (NSF, por sus siglas en inglés), en consulta con la Universidad Internacional de la Florida (FIU, por sus siglas en inglés), ha preparado una Evaluación Ambiental (EA, por sus siglas en inglés) para evaluar los posibles efectos de autorizar el uso de fondos previstos por la NSF para la construcción y operación de un Banco de Pruebas para el Diseño Físico ("Physical Design Testbed", o PDT, por sus siglas en inglés) en la propiedad de FIU en Miami, Florida.

El PDT de 8,500 pies cuadrados probaría experimentalmente el impacto de los eventos de los huracanes grandes utilizando vientos extremos combinados con marejada ciclónica y acciones del oleaje sobre diferentes tipos de infraestructura civil. Si se construye, el PDT informaría, probaría, y confirmaría el diseño de una eventual Infraestructura de Prueba Nacional a Gran Escala para Resistencia de la Comunidad en Eventos de Vientos, Marejadas, y Oleaje Extremos ("National Full-scale Testing Infrastructure for Community Hardening to Extreme Wind, Surge, and Wave Events, o NICHE, por sus siglas en inglés).

Se invita al público a revisar y comentar sobre el EA durante el período de comentarios públicos de 30 días desde el 30 de julio de 2022 hasta el 31 de agosto de 2022. Se propone construir el PDT dentro del área inundable de 100 años de la Agencia Federal para el Manejo de Emergencias (FEMA, por sus siglas en inglés) y cumpliría con la Orden Ejecutiva 11988, "Manejo de la Llanura Aluvial". Los comentarios deben ser sometidos a Joy Pauschke, Ph.D., P.E., Fundación Nacional de las Ciencias, División de Innovación Civil, Mecánica y de Manufactura; correo electrónico: jpauschk@nsf.gov.

El EA está disponible en la página de Internet de la NSF en: https://www.nsf.gov/eng/research-infrastructure/env/environmental-assessment.jsp. Copias impresas del EA pueden ser revisadas en los siguientes lugares:

1. Steve and Dorothea Green Library; 11200 SW 8th Street, Miami, FL 33199; (305)348-2451
2. Fairlawn Branch Library; 6376 SW 8th Street, Miami, FL 33144; (305)261-1571
3. International Mall Branch Library; 10315 NW 12 Street, Doral, FL 33172; (305)594-2514

Los comentarios sustantivos serán atendidos apropiadamente en los documentos finales de la revisión ambiental, los cuales serán publicados en la página de Internet que se menciona arriba.

**EL NUEVO HERALD**
**Un Periodico McClatchy**

**PUBLICADO DIARIAMENTE**
**MIAMI-DADE-FLORIDA**

**ESTADO DE LA FLORIDA**
**CONDADO DE MIAMI DADE**

Ante la autoridad que suscribe se presento en persona: Amanda Grisham, CUSTODIAN OF RECORDS Quien bajo juramento dice que El/ella es de El Nuevo Herald, un periodico en Miami, Condado de Miami Dade, Florida; que la copis adjunta de este anuncio fue publicado en dicho periodico, en las ediciones de:
Publication: El Nuevo Herald

No. of Insertions: 1
Beginning Issue of: 07/31/2022
Ending Issue of: 07/31/2022

El declarante afirma ademas que El Nuevo Herald es un periodico que Se publica en el mencionado condado De Miami Dade, Florida y que ha sido Publicado diariamente en dicho condado De Miami Dade, Florida, habiendo sido clasificado por las Oficinas de Correos en Miami condado de Miami Dade, como material con franquicia de segunda clase desde El 29 de Marzo de 1976. El Declarante Asegura que no ha pagado ni prometido Pagar a personal alguna, firma o Corporacion ningun descuento reembolso Comision o devolucion de fondos con el Proposito de lograr la publicacion de este Anuncio en dicho periodico.

Amanda Grisham

Jurado y subscrito ante mi en Este Dia 28th day of July in the year of 2022

Stefani Beard

Notary Public in and for the state of Texas, residing in Dallas County

STEFANI SCOTT BEARD
My Notary ID # 131768951
Expires October 23, 2022

**Extra charge for lost or duplicate affidavits.**
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