

CUTLER BAY 53- ACRE WETLAND RESTORATION PROJECT

**CUTLER BAY PARKS AND RECREATION
ADVISORY COMMITTEE MEETING
APRIL 1ST, 2024**



Kimley » Horn

INTRODUCTION

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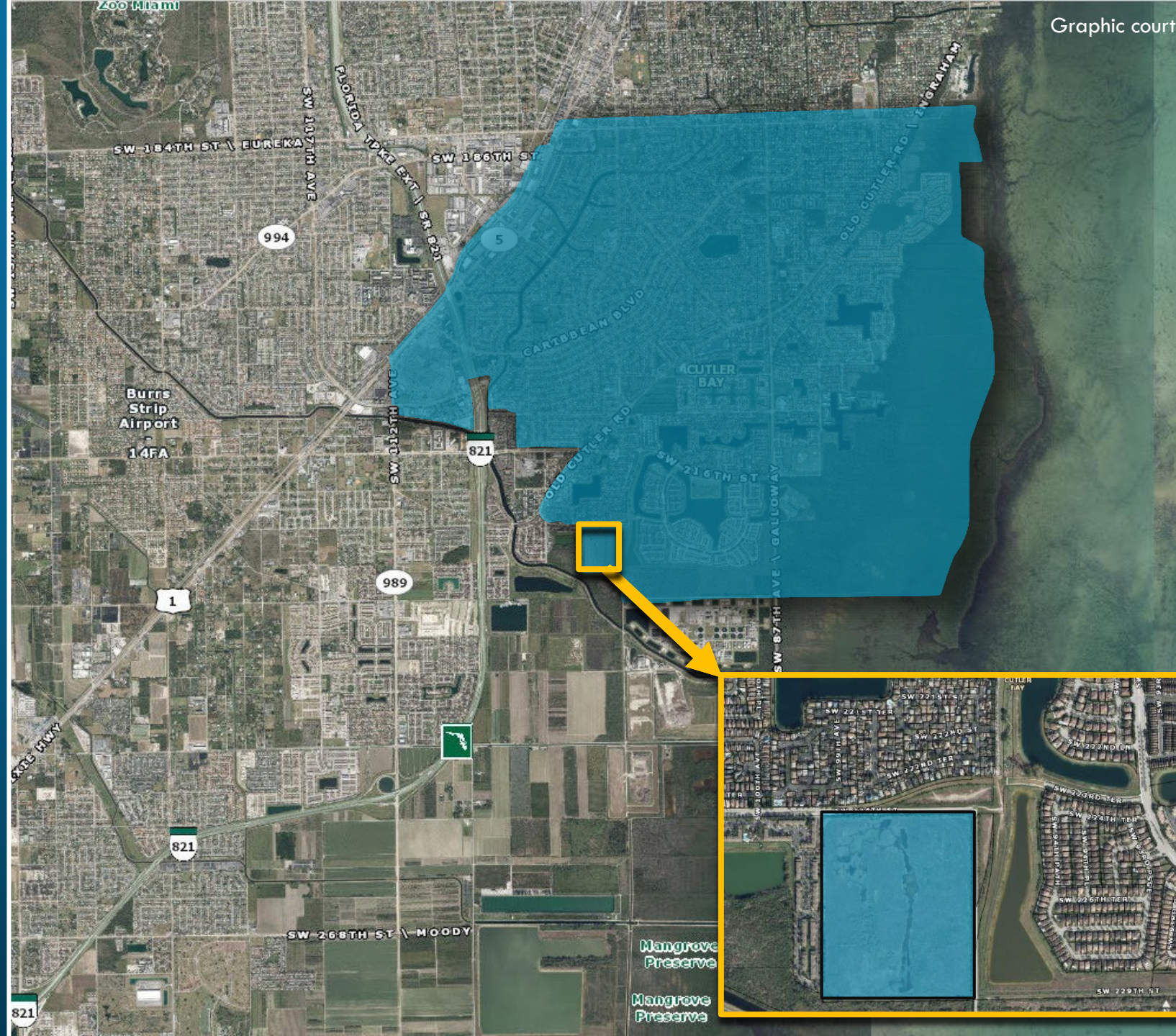
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- Kimley-Horn was previously contracted to create a restoration and maintenance plan.
- We are now leading the permitting, educational signage efforts, and pump feasibility study



LOCATION

- SW 97 Avenue and SW 224 Street
- Approximately 53 acres of existing wetlands (low quality)
- Owned by South Florida Water Management District (SFWMD)



HISTORY

- In 2012, Lennar Land Partners, Inc. conveyed the land to the South Florida Water Management District (SFWMD)
 - (Resolution 2012-1107)
- During 2005-2010, the area drew a large diversity of migratory birds as the conditions were ideal for their feeding preferences.
 - During that time as many as 120 species of birds were sighted.



The current vision is to develop a nature preserve and observation facility. The benefits will be far-reaching and will provide the town, nearby communities, and the state with numerous opportunities.



Environmental



Educational



Ecotourism

VISION FOR THE FUTURE

The restoration plan is intended to become a part of the Town of Cutler Bay's Project Concept Report: *Cutler Bay Wetland Restoration Project*.

Three main project components:

- 1 Creation of suitable habitat for shorebird diversity.
- 2 Eliminate illegal dumping.
- 3 Eliminate ATV usage.

PROPOSED RESTORATION ACTIVITIES

1

HABITAT AND SHOREBIRD DIVERSITY



Photo courtesy of Cutler Bay

- A drastic reduction in the bird species counts taken between 2005-2010.
- The lack of routine maintenance has permitted invasive plants to take over both the berm and the mitigation area.
- The culmination of the permitting, protection, and restoration efforts will allow for the revival of this area, attracting hundreds of species of shorebirds.

SPECIES PREVIOUSLY SPOTTED IN CUTLER WETLANDS



Hudsonian Godwit



Bald Eagle



Black-Necked Stilt



Snow Goose



King Rail



Red-Winged Blackbird

2 ILLEGAL DUMPING



- The Town of Cutler Bay conducted a Feasibility Study (July 2008) to evaluate the closure of 97th Avenue (along with other roadways within the Town).
- Closing 97th Avenue would increase on-site ecological value by minimizing illegal dumping, reducing traffic, and lowering overall noise and disturbance. (Future Phase)
- Two-rail wood fencing will also be installed to reduce trespassing and illegal dumping.

3 ATV USAGE

- The installation of the two-rail wood fencing will also prevent unauthorized vehicles and ATVs from entering the property.
- This will reduce damage to the site and limit the impacts on shorebirds and their habitat.



RESTORATION ACTIVITIES: FORAGING HABITAT



Creating varying elevations within the site will increase bird diversity.



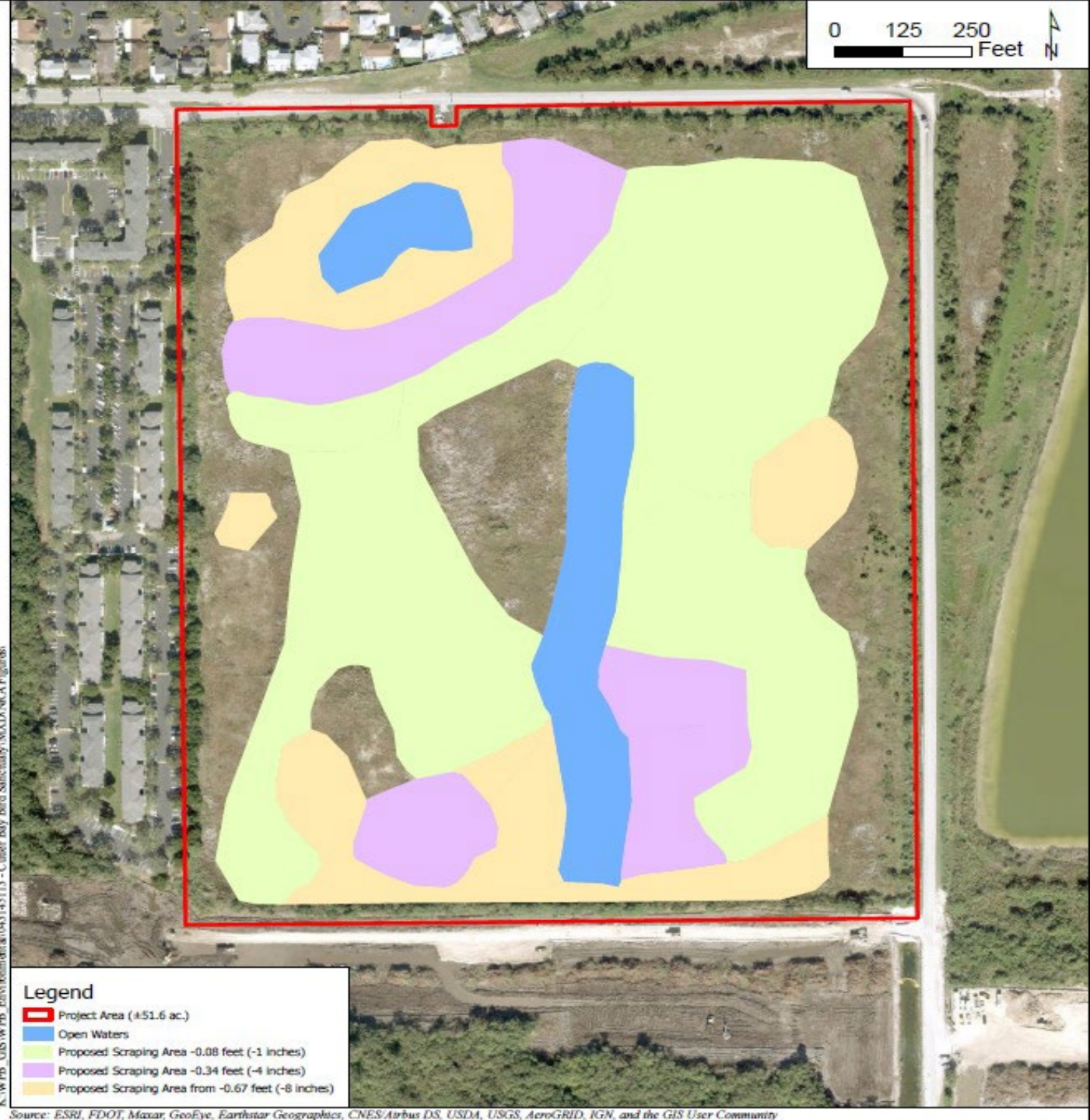
Research shows foraging depths for a variety of shorebirds and dabbling ducks range from 0 centimeters (cm) to greater than 20 cm.



To create the varying foraging levels, the Town of Cutler Bay proposes to remove soils from specific areas within the Project Site

PROPOSED RESTORATION – SCRAPE DOWNS MAP

- Elevations between 0.10 feet and 0.20 feet should be scraped down to -0.08 feet (-1 in.)
- Elevations of 0 to 0.05 feet should be scraped down to -0.67 feet (-8 in.)
- Elevations between 0.05 feet and 0.10 feet should be scraped down to -0.34 feet (-4 in.)



RESTORATION ACTIVITIES: EXOTIC VEGETATION AND DEBRIS REMOVAL



Exotic and nuisance species are present within the wetland areas and along the upland berm surrounding the Project Site



Exotic species include Brazilian pepper (*Schinus terebinthifolius*) and napier grass (*Pennisetum purpureum*)

- Both are Category I exotic species listed on the Florida Exotic Pest Plant Council plant list
- Cattail is a nuisance species which is also found within the wetland areas.



In response, the Town will conduct an exotic and nuisance treatment and will remove any existing debris within the project site, along with continued maintenance.

ADDITIONAL ACTIVITIES: SIGNAGE & EDUCATIONAL OPPORTUNITIES

Wetland Preservation Signs or Bird Sanctuary signs are proposed to be placed along the edges of the preserve.

- Help identify the area to visitors and keep the public from accessing or dumping at the site.
- Public educational signage is proposed to be installed throughout the site.
 - The educational boards will display information regarding potential wildlife species that utilize the preserve.
 - Kimley-Horn will be creating these signs.



ADDITIONAL ACTIVITIES: SIGNAGE & EDUCATIONAL OPPORTUNITIES

This project will provide educational opportunities for the local and nearby communities.

- Five of the public schools in Cutler Bay and one charter school have an academic track focusing on environmental sciences:
 - Dr. E. L. Whigham Elementary's "Whigham's Aquatic Visionary Explorers" (WAVE) Academy
 - Gulfstream Elementary's Marine Science Academy
 - Cutler Bay Ocean Academy of Science and Technology (COAST) Academy programs at Cutler Bay Middle and Cutler Bay Senior High
 - Mater Academy Cutler Bay (K-12) is a charter school offering an environmental and animal science learning curriculum



Photos courtesy of Cutler Bay



ADDITIONAL ACTIVITIES: PUMP FEASIBILITY STUDY

RESTORE NATURAL FLOW

Scope of work includes feasibility of installing two pumps and other flow through features to restore natural flow

Pump install and permitting are not included in Phase I of this project.

Permitting



sfwmd.gov

The proposed project is located within the jurisdiction of the SFWMD. The proposed project will require an ERP modification to the existing permit (13-01828-P).



The proposed project is located within the jurisdiction of Miami-Dade County and will require a modification to the existing Class IV permit (FW90-065).

Coordination



During the ERP permitting process, coordination will occur with the Florida Fish and Wildlife Conservation Commission (FWC). Due to the site having known nesting birds, a nest survey will be conducted during shorebird nesting season.



Recommended that coordination occur with the US Fish and Wildlife Service (USFWS) for potential listed species impacts.

The applications are in process and are planned for submittal to agencies in April 2024.

PERMITTING & COORDINATION FOR PHASE I

IN SUMMARY

- Kimley-Horn is leading the permitting, mitigation, and educational signage efforts.
- Three main project components (suitable habitat for shorebird diversity, eliminate illegal dumping, eliminate illegal ATV usage).
- Proposed restoration scrape downs.
- Exotic vegetation and debris removal.
- Ecotourism and educational opportunities.
- Permitting is underway (*planned for submittal to agencies in April 2024*).
- Opportunity for continued partnership throughout this project and following its completion.

**THANK YOU FOR YOUR
CONTINUED SUPPORT!**

QUESTIONS?

PLEASE CONTACT TORI.BACHELER@KIMLEY-HORN.COM



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