

# Imperiled Beach-Nesting Bird Species Conservation Measures and Permitting Guidelines



FWC Photos



# What are Species Conservation Measures & Permitting Guidelines?


- Meant to streamline technical assistance & permitting
  - Outlines actions expected to cause take
  - Includes avoidance measures
  - FWC permitting, including minimization & mitigation when take unavoidable
- Incorporated in rule
- Developing for all species in FWC's Imperiled Species Management Plan



SPECIES CONSERVATION MEASURES AND PERMITTING GUIDELINES

## Florida Burrowing Owl

*Athene cunicularia floridana*



Species Overview

**Status:** Listed as state Threatened on Florida's Endangered and Threatened Species List.

**Current Protections**

- 68A-27.003(a), F.A.C. No person shall take, possess, or sell any of the endangered or threatened species included in this subsection, or parts thereof or their nests or eggs except as allowed by specific federal or state permit or authorization.
- 68A-27.001(4), F.A.C. Take – to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. The term "harm" in the definition of take means an act which actually kills or injures fish or wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. The term "harass" in the definition of take means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering.
- Florida burrowing owls, active nests, eggs, and young also are protected under the Federal Migratory Bird Treaty Act, state Rule 68A-16.001, F.A.C., and state Rule 68A-4.001, F.A.C.

Photograph courtesy Jack Rogers.

### Biological Background

This section describes the biological background for this species and provides context for the following sections. It focuses on the habitats that support essential behaviors for the Florida burrowing owl, threats faced by the species, and what constitutes take for the species. The Florida burrowing owl is a small, long-legged owl (averaging 9 inches in height) that uses burrows for breeding and sheltering. The Florida burrowing owl's distribution is localized and patchy, occurring primarily in peninsular Florida, with isolated pairs and small colonies found as far west as Eglin Air Force Base and as far south as the Dry Tortugas. The typical breeding season for the Florida burrowing owl is February 15 to July 10, though owls can breed earlier or later. For example, Millsap and Bear (1990) observed egg-laying as early as October 2 and as late as May 9. FWC staff (Zambrano, unpublished data) found that only 4.5% of 89 burrows scoped in south Florida between November 30, 2007, and February 8, 2008, contained eggs or flightless young. Incubation lasts about 4 weeks, and young first start to emerge from the burrow about 2 weeks after hatching (Zarn 1974). Juvenile burrowing owls start learning to fly about 4 weeks after hatching and are starting to fly well by 6 weeks of age (Zarn 1974). Juvenile burrowing owls continue to use their parents' burrows for 30-60 days after they start flying (Mealey 1997).

**Habitat features that support essential behavioral patterns**

Florida burrowing owls use a breeding burrow and often 1 or more satellite burrows for the essential behaviors of breeding and sheltering. Florida burrowing owls usually dig their own burrows, which are typically 5 to 10 feet long and can be excavated by the owls in as little as 2 days (Millsap 1996). Burrowing owls in Florida are known to use burrows year-round, for roosting during the winter and for raising young during the breeding season (Millsap 1996; R. Mrykalo, personal communication). Some owls leave their burrows for part of the year due to flooding from seasonal rains (Mrykalo 2005). Burrowing owls prefer

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# Brief history

- Complex issue
- Non-regulatory & regulatory approaches
- Brief update to Commissioners in May '21
- Draft to Commissioners in Dec '21
- Final version to Commissioners summer '22





# Anticipated users include those conducting...

- CCCL-related activities  
E.g., coastal construction, beach cleaning, special events
- JCP-related activities  
E.g., beach nourishment, groins/jetties, dredging
- Rooftop repairs
- Scientific research





What are Imperiled Beach-nesting Birds?

# What are Imperiled Beach-nesting Birds?

Refers to state  
Threatened  
shorebirds &  
seabirds





# Two Shorebirds

American oystercatcher



Snowy plover





# Two Seabirds

Black skimmer



Least tern





What are their protections?

# Protections for state Threatened species

- 68A-27.003(a), F.A.C. No person shall [take](#), possess, or sell any of the endangered or threatened species included in this subsection, or parts thereof or their nests or eggs except as allowed by specific federal or state permit or authorization.



Britt Brown/FWC



# What is “take?”

- 68A-27.001: “Take – to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct.”



Britt Brown/FWC





# What does it mean to “harm?”

- 68A-27.001: “The term ‘harm’...means an act which actually kills or injures fish or wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.”
- An example: A vehicle runs over an egg or chick



Britt Brown/FWC

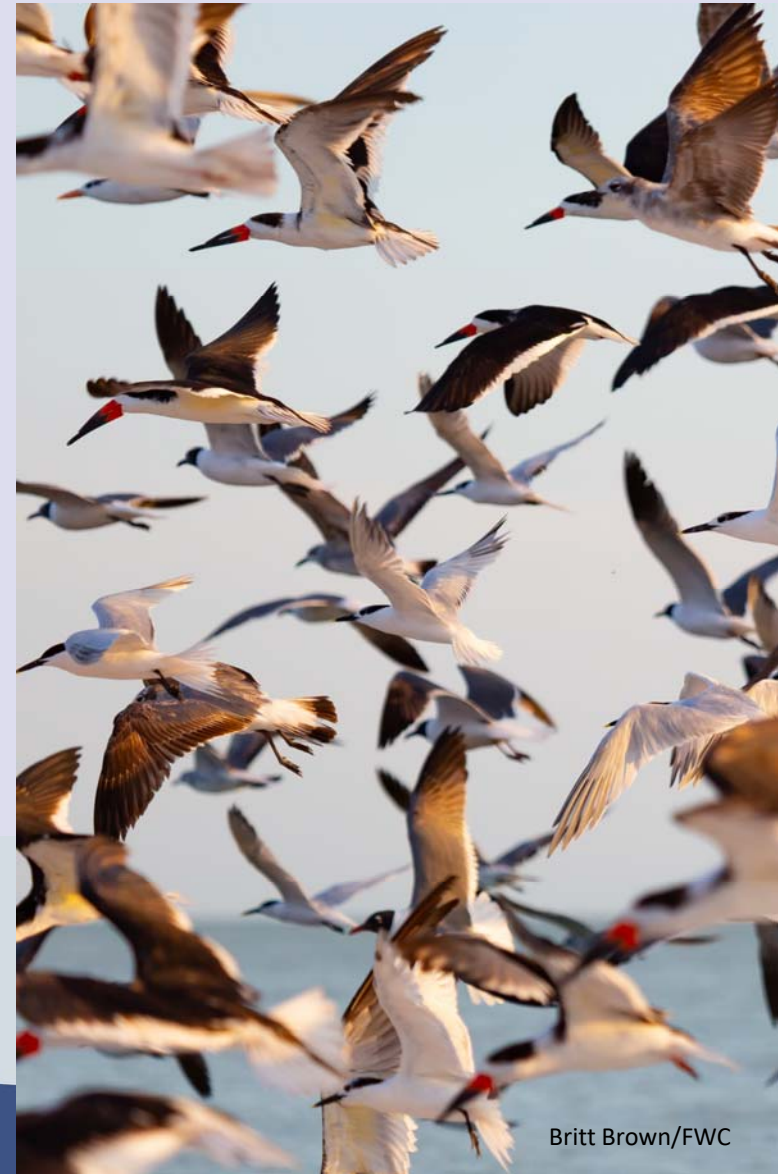
- Eggs and chicks are camouflaged
- Chicks freeze when approached





# What does it mean to “harass?”

- 68A-27.001: “The term ‘harass’...means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering.”
- An example: Equipment keeps birds from nesting or flushes them from nests.



Britt Brown/FWC

Where & how do Guidelines apply?





# We're focusing on...

- Breeding Site
  - Active Breeding Site
  - Recent Breeding Site
- Critical Brood-rearing Site
- Critical Roosting Site



# Active Breeding Site -- Defined

- Breeding Sites where one or more Active Nests are present.



## Recent Breeding Site -- Defined

- Breeding sites where one or more Active Nests have been present in the preceding 5 breeding seasons.





# Critical Brood-Rearing Sites

- Snowy plovers only
- Precocial chicks travel several km to these sites
- Only in a few counties in SW & NW Florida
- “Active” March 15-August 31

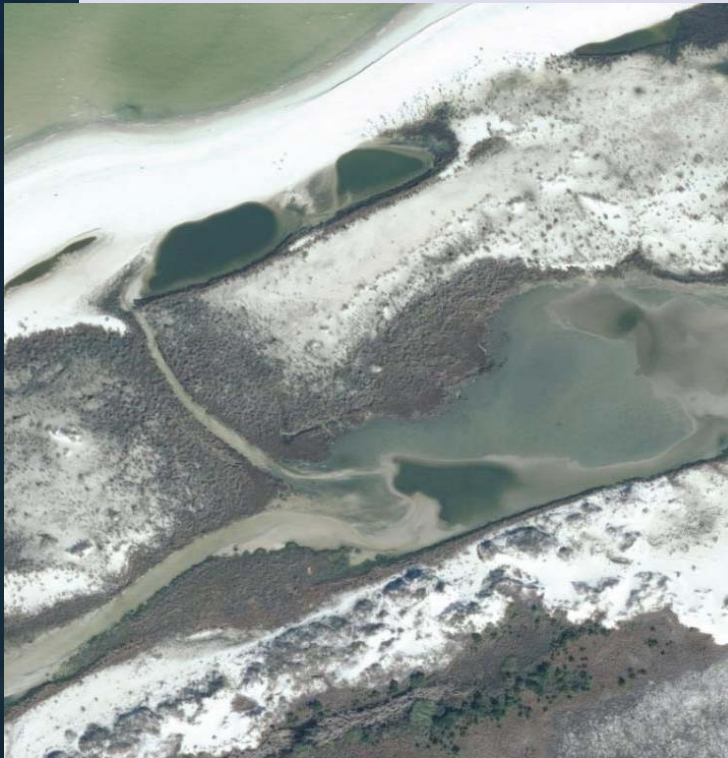


Photo: John Young



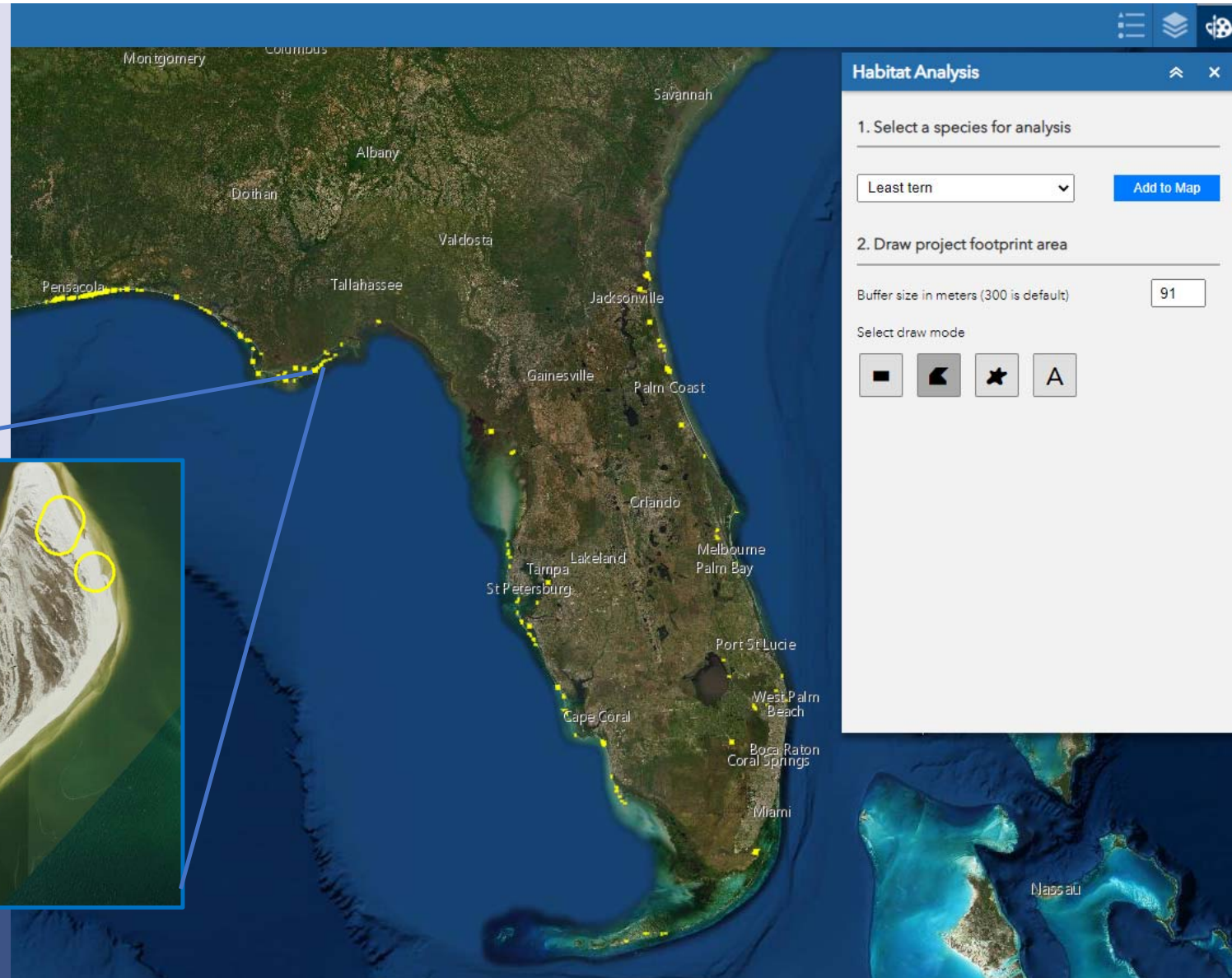
# Critical Roosting Sites

- Limited to American oystercatchers
- Cedar Key area, Levy County



# Online tool

- Identifies sites
- In development





# Actions cause take if they result in...

- Injury or death of adults, eggs, young
- Significant habitat modification
- Flushing from Active Breeding Sites
- Flushing from Critical Brood-rearing Sites
- Keeping birds from breeding
- Forcing birds to fly from Critical Roosting Sites
- Capturing, handling, collecting, etc.







What is FWC's approach in guidelines?

Photo by Alexander Kropp

# 1. Is take avoidable or otherwise authorized?

- Flow chart & Appendices
- Avoidance measures
- Examples of activities not expected to cause take
- Guidelines can authorize take

E.g., newly-cleared construction sites or water management areas

E.g., native plantings & sand fencing for dune restoration, in some cases



## 2. Determine the type of take

- Harm
  - Significant habitat modification
  - Direct killing/injuring (FWC typically does not issue permits for this)
- Harassment
- Has implications for mitigation





### 3. Estimate extent of take

- Harassment: Number of breeding pairs
- Harm: Square feet



## 4. Determine minimization & mitigation



- Permit must provide conservation or scientific benefit to the species
  - Benefit typically through minimization & mitigation
  - Minimization *reduces* take
  - Mitigation *counterbalances* take & *provides a benefit*.





## Summary of approach

1. Is take avoidable or otherwise authorized?
2. Determine type of take
3. Estimate extent of take
4. Determine minimization & mitigation





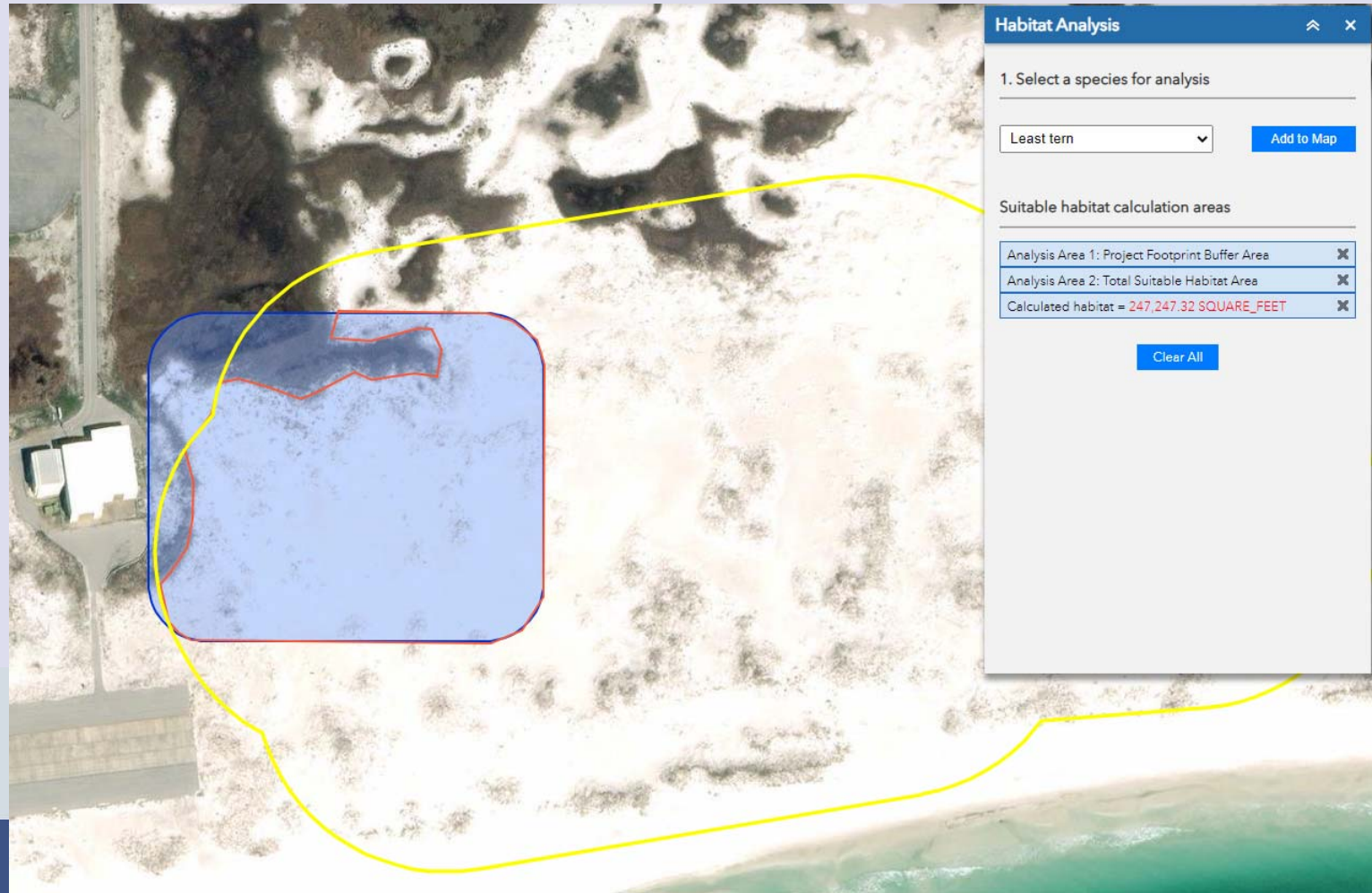
# Summary of approach

1. Is take avoidable or otherwise authorized?
2. Determine type of take
3. Estimate extent of take
4. Determine minimization & mitigation

*Guidelines have online tool to assist*

# Online tool

- Recent Breeding Site (Yellow)
- Buffered project footprint (Blue)
- Square feet of habitat (Red)



# Examples of minimization options

- Bird Monitor
  - Surveys prior to activities
  - Posts & establishes buffers as necessary
  - Meets minimum qualifications

*NOTE: We will need more bird monitors*





# Examples of mitigation options

- On-site conservation
  - E.g., posting a seasonal refuge
- Off-site conservation
  - Protecting, restoring, or creating habitat
  - Predation management
- Financial contribution
- Standard mitigation options available for many activities  
*[Appendix B]*



# Examples of mitigation options

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*[Appendix B]*





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# DEP Joint Coastal Permit activities

- Beach nourishment
  - JCP permit conditions typically constitute *avoidance* of take
- Dredging
  - FWC permit may be necessary
  - Minimization & mitigation case-by-case
- Groins, jetties
  - Standard mitigation



# Financial contribution: harassment

- Measured per breeding pair of birds and varies by species

Species	Per pair (Per year)
American oystercatcher	\$1,900
Black skimmer	\$270
Least tern	\$200
Snowy plover	\$2,250





# Financial contribution: harassment

- Based on cost of 5 Shorebird Program conservation strategies

Species	Per pair (Per year)
American oystercatcher	\$1,900
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Least tern	\$200
Snowy plover	\$2,250



# Harassment – Special Event

- Special event within 300 feet of a colony of 20 least tern pairs

Least tern pairs	Cost per pair	Mitigation
20	\$200	\$4,000



# Financial contribution: significant habitat modification

- Measured per square foot
- Varies based on priority of site (tier)
- Direct impacts = habitat removed
- Indirect impacts = habitat rendered unusable or less suitable

Tier	Direct impact (\$/sq ft)	Indirect impact (\$/sq ft)
Tier 1	\$8.00	\$2.00
Tier 2	\$6.50	\$1.50
Tier 3	\$1.75	\$0.50





# Financial contribution: significant habitat modification

- Cost based on the cost of habitat restoration/creation projects
- Tiers assigned based on number of breeding pairs

<b>Tier</b>	<b>Direct impact (\$/sq ft)</b>	<b>Indirect impact (\$/sq ft)</b>
Tier 1	\$8.00	\$2.00
Tier 2	\$6.50	\$1.50
Tier 3	\$1.75	\$0.50



# Significant Habitat Modification -- House

- House built in Tier 1 least tern Recent Breeding Site

Type of Modification	Square feet
Direct	0 sq ft
Indirect	27,500 sq ft

Type of Modification	Mitigation
Direct	\$0
Indirect	\$55,000
<b>Total</b>	<b>\$55,000</b>



# Financial contribution: Dune walkovers/crossovers

- Mitigation varies by intensity of impact
- Also varies based on priority of site (tier)

Tier	Single family	Multi-family (< 10 units) or parking area (< 10 spots)	Multi-family (> 10 units) or parking area (> 10 spots)
Tier 1	\$500	\$19,000	\$33,000
Tier 2	\$500	\$9,500	\$19,000
Tier 3	\$500	\$950	\$9,500





# Intentional take

- FWC also issues permits for *intentional* take
- Scientific Collecting Permits
- Guidelines describe how to submit a complete application




## How do Guidelines relate to the Florida Beaches Habitat Conservation Plan?

- FL Beaches HCP would replace the Guidelines for state Threatened species for DEP CCCL activities
- But Guidelines include more than just CCCL activities




# How to Comment

- Written comments may be emailed to [Imperiled@MyFWC.com](mailto:Imperiled@MyFWC.com)
- Draft Guidelines available at:  
[MyFWC.com/WildlifeHabitats/Wildlife/Species-Guidelines](https://myfwc.com/WildlifeHabitats/Wildlife/Species-Guidelines)




Florida Fish and Wildlife  
Conservation Commission



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## Species Conservation Measures and Permitting Guidelines



**PUBLIC COMMENT PERIOD OPEN**

The Commission is gathering public input for the development of Species Conservation Measures and Permitting Guidelines for 8 species, including the Florida mouse, gopher frog, mangrove rivulus, Suwannee cooter, Lower Keys populations of the red rat snake, striped mud turtle, and peninsula ribbonsnake, and revisions to existing guidelines for the Florida pine snake.

Species Conservation Measures and Permitting Guidelines are being developed for all species included [Florida's Imperiled Species Management Plan](#). Completion of Guidelines for all species included in Florida's Imperiled Species Management Plan is anticipated in 2021.

While guidelines are being developed, stakeholders can provide written comments on the Guidelines to [Imperiled@myfwc.com](mailto:Imperiled@myfwc.com). Public webinars will be conducted during public comment periods, which occur for each set of Guidelines developed. Public comment opportunities will be advertised in the Florida Administrative Register and on this webpage

