



United States Department of the Interior



FISH AND WILDLIFE SERVICE
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In Reply Refer To:

September 11, 2018

Consultation Code: 04EF2000-2018-SLI-1063

Event Code: 04EF2000-2018-E-03379

Project Name: Turkey Point Subsequent License Renewal

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/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>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

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 Tracking Number 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
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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:

South Florida Ecological Services Field Office

1339 20th Street

Vero Beach, FL 32960-3559

(772) 562-3909

Project Summary

Consultation Code: 04EF2000-2018-SLI-1063

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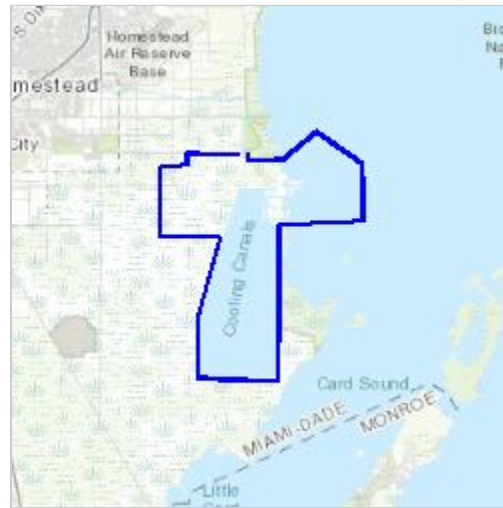
Project Name: Turkey Point Subsequent License Renewal

Project Type: ** OTHER **

Project Description: In January 2018, Florida Power & Light Company (FPL) submitted an application for subsequent license renewal for Turkey Point Nuclear Generating Units 3 & 4 (Turkey Point) to the U.S. Nuclear Regulatory Commission (NRC). The current renewed licenses expire at midnight on July 19, 2032, for Unit 3 (DPR 31) and April 10, 2033, for Unit 4 (DPR 41). The NRC's Federal action is to decide whether to renew the licenses for an additional 20 years. Turkey Point is a two unit, nuclear powered, steam electric generating facility that began commercial operation in June 1986. The Turkey Point site is located on western edge of Biscayne Bay and lies within the Mangrove and Coastal Glades physiographic province. This area includes a broad band of wetlands at or near sea level that is often flooded by tides or freshwater runoff. Circulating water for the cooling system is withdrawn from and discharged to a closed system of cooling canals commonly referred to as the cooling canal system. License renewal would include continued operations of Turkey Point and the associated cooling canal system and other existing infrastructure. FPL does not anticipate performing refurbishment or major construction activities during the license renewal period. Ground disturbing activities within developed portions of the site would be limited to mowing, weed-eating, hedge trimming, weed removal, herbicide application, tree trimming, brush removal, debris removal, and the maintenance and repair of plant infrastructure such as roadways, piping installations, fencing, and security-related structures. Within less developed portions of the site that contain wetlands, mangroves, and marshes, ground disturbing maintenance activities may include hand and mechanical vegetative control, hand and mechanical debris removal, maintenance of the cooling canal system access roads (e.g., mechanical scrapping and aggregate placement), underground piping repair (e.g., digging and equipment staging), and equipment replacement at groundwater wells and monitoring stations. FPL annually removes exotic species, such as Australian pine (*Casuarina equisetifolia*) and Brazilian pepper (*Schinus terebinthifolius*), from within cooling canal system canals and berms, along the access roads, and cooling canal system perimeter roads.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/25.406314602155497N80.36061845744243W>



Counties: Miami-Dade, FL

Endangered Species Act Species

There is a total of 46 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 Fisheries¹, 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 <i>Eumops floridanus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8630	Endangered
Florida Panther <i>Puma (=Felis) concolor coryi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1763 Habitat assessment guidelines: https://ecos.fws.gov/ipac/guideline/assessment/population/8/office/41420.pdf	Endangered
Puma (=mountain Lion) <i>Puma (=Felis) concolor (all subsp. except coryi)</i> Population: FL No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6049	Similarity of Appearance (Threatened)
West Indian Manatee <i>Trichechus manatus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. <i>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</i> Species profile: https://ecos.fws.gov/ecp/species/4469	Threatened

Birds

NAME	STATUS
<p>Bachman's Warbler (=wood) <i>Vermivora bachmanii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3232</p>	Endangered
<p>Cape Sable Seaside Sparrow <i>Ammodramus maritimus mirabilis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6584</p>	Endangered
<p>Everglade Snail Kite <i>Rostrhamus sociabilis plumbeus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7713 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/1221/office/41420.pdf</p>	Endangered
<p>Florida Grasshopper Sparrow <i>Ammodramus savannarum floridanus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/32</p>	Endangered
<p>Florida Scrub-jay <i>Aphelocoma coerulescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6174</p>	Threatened
<p>Ivory-billed Woodpecker <i>Campephilus principalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8230</p>	Endangered
<p>Kirtland's Warbler <i>Setophaga kirtlandii</i> (= <i>Dendroica kirtlandii</i>) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8078</p>	Endangered
<p>Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039</p>	Threatened
<p>Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864</p>	Threatened
<p>Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614</p>	Endangered
<p>Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC</p>	Threatened

NAME	STATUS
<p>No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477 Habitat assessment guidelines: https://ecos.fws.gov/ipac/guideline/assessment/population/124/office/41420.pdf</p>	

Reptiles

NAME	STATUS
<p>American Alligator <i>Alligator mississippiensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/776</p>	Similarity of Appearance (Threatened)
<p>American Crocodile <i>Crocodylus acutus</i> Population: U.S.A. (FL) There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6604</p>	Threatened
<p>Eastern Indigo Snake <i>Drymarchon corais couperi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/646</p>	Threatened
<p>Hawksbill Sea Turtle <i>Eretmochelys imbricata</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3656</p>	Endangered
<p>Leatherback Sea Turtle <i>Dermochelys coriacea</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1493</p>	Endangered
<p>Loggerhead Sea Turtle <i>Caretta caretta</i> Population: Northwest Atlantic Ocean DPS There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1110</p>	Threatened

Fishes

NAME	STATUS
<p>Atlantic Sturgeon (gulf Subspecies) <i>Acipenser oxyrinchus (=oxyrhynchus) desotoi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/651</p>	Threatened

Snails

NAME	STATUS
Stock Island Tree Snail <i>Orthalicus reses</i> (not incl. <i>nesodryas</i>) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/466	Threatened

Insects

NAME	STATUS
Bartram's Hairstreak Butterfly <i>Strymon acis bartrami</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4837	Endangered
Florida Leafwing Butterfly <i>Anaea troglodyta floridalis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6652	Endangered
Miami Blue Butterfly <i>Cyclargus</i> (= <i>Hemiargus</i>) <i>thomasi bethunebakeri</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3797	Endangered
Schaus Swallowtail Butterfly <i>Heraclides aristodemus ponceanus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1951	Endangered

Flowering Plants

NAME	STATUS
Beach Jacquemontia <i>Jacquemontia reclinata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1277	Endangered
Blodgett's Silverbush <i>Argythamnia blodgettii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6823	Threatened
Cape Sable Thoroughwort <i>Chromolaena frustrata</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4733	Endangered
Carter's Mustard <i>Warea carteri</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5583	Endangered
Carter's Small-flowered Flax <i>Linum carteri carteri</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7208	Endangered
Crenulate Lead-plant <i>Amorpha crenulata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6470	Endangered
Deltoid Spurge <i>Chamaesyce deltoidea ssp. deltoidea</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/199	Endangered
Everglades Bully <i>Sideroxylon reclinatum ssp. austrofloridense</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4735	Threatened
Florida Brickell-bush <i>Brickellia mosieri</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/956	Endangered
Florida Pineland Crabgrass <i>Digitaria pauciflora</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3728	Threatened
Florida Prairie-clover <i>Dalea carthagenensis floridana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2300	Endangered
Florida Semaphore Cactus <i>Consolea corallicola</i> There is final critical habitat for this species. The location of the critical habitat is not available.	Endangered

NAME	STATUS
Species profile: https://ecos.fws.gov/ecp/species/4356	
Garber's Spurge <i>Chamaesyce garberi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8229	Threatened
Okeechobee Gourd <i>Cucurbita okeechobeensis</i> ssp. <i>okeechobeensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5999	Endangered
Pineland Sandmat <i>Chamaesyce deltoidea pinetorum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1914	Threatened
Sand Flax <i>Linum arenicola</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4313	Endangered
Small's Milkpea <i>Galactia smallii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3360	Endangered
Tiny Polygala <i>Polygala smallii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/996	Endangered

Ferns and Allies

NAME	STATUS
Florida Bristle Fern <i>Trichomanes punctatum</i> ssp. <i>floridanum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8739	Endangered

Critical habitats

There are 2 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
American Crocodile <i>Crocodylus acutus</i> https://ecos.fws.gov/ecp/species/6604#crithab	Final
West Indian Manatee <i>Trichechus manatus</i> https://ecos.fws.gov/ecp/species/4469#crithab	Final