Proposed Terrestrial Critical Habitat for the Northwest Atlantic Loggerhead Sea Turtle Population

U.S. Fish and Wildlife Service





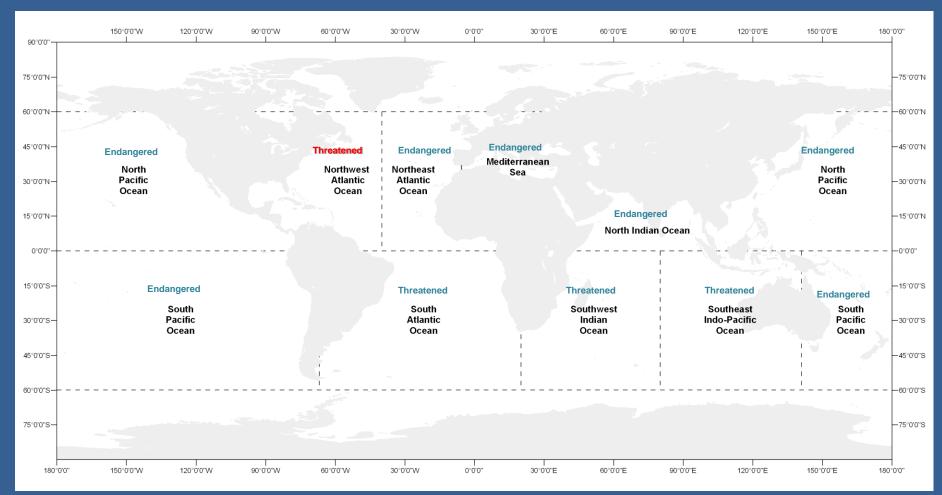
History of Loggerhead Listing (joint responsibility USFWS and NOAA Fisheries)

- July 1978 Listed as threatened throughout worldwide range; jurisdiction shared by NOAA Fisheries and U.S. Fish and Wildlife Service.
- August 2007 ESA 5-year review recommended full status review to determine if there were Distinct Population Segments (DPS).
- August 2009 Joint Biological Review Team completed status review, identifying 9 DPS.
- September 22, 2011 NOAA Fisheries and USFWS published a final rule changing the loggerhead's listing from a single, global threatened listing to 9 DPSs listed as endangered or threatened.





Loggerhead Distinct Population Segments







History of Loggerhead Critical Habitat

- Under the ESA, critical habitat <u>must</u> be designated for any listed species to the maximum extent prudent and determinable. Critical habitat designations can only be completed by issuing a rule.
- "not determinable" at the time the final listing rule was published due to the lack of comprehensive data and information necessary to identify and describe physical and biological features of the terrestrial and marine habitats of the loggerhead.









Loggerhead Sea Turtle - complex life cycle













Threats

Recreational Use, Beach Driving, Predation, Beach Erosion, Climate Change, Habitat Obstructions, Beach Sand Placement Activities, In-water and Shoreline Alterations,















Threats

Coastal Development, Artificial Lighting, Human-caused disasters and response to natural and human-caused disasters, and Military testing and training activities.













What is Critical Habitat?

- §3(5)(A)-the term "critical habitat" for a threatened or endangered species means –
- (i) the specific areas within the geographical area occupied by the species, at the time it is listed... on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and
- (ii) specific areas outside the geographical area occupied by the species at the time it is listed... upon a determination by the Secretary that such areas are essential for the conservation of the species.



Geographical area occupied by the species

The geographical area in which the species can be found. Such areas may include migratory corridors, seasonal habitats, and habitats used periodically.





Essential to the conservation of the species

This is not defined in ESA or regulations. It reflects habitat needed to see the species recovered.





Special management considerations or protection

Methods or procedures useful in protecting the physical or biological features essential to the conservation of listed species.







Physical and Biological Features (PBF): Sites for breeding, reproduction, or rearing (or development) of offspring



Nearshore access from the ocean to the beach for nesting females



Sand that allows for successful embryo development



Sand that allows for suitable nest construction

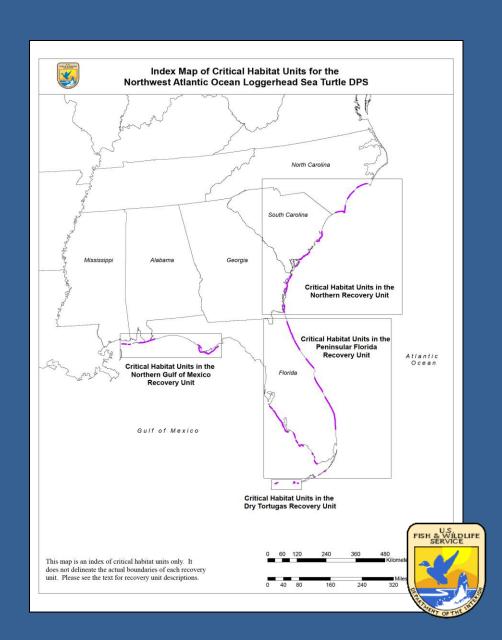


Sufficient darkness to ensure nesting turtles orient to sea



Selection Criteria

- Extra-tidal or dry sandy beaches
- Capable of supporting a high density of nests.
- Serve as an expansion area for beaches with a high density of nests.
- Well distributed within each State or region to ensures good spatial distribution.



Selection Criteria- NRU

 Divided beach nesting densities into four equal groups by State and selected beaches that were within the top 25 % (highest nesting densities. Beaches adjacent to them encompass the majority of nesting within the Northern recovery unit.

State	Medium Nesting Density	High Nesting Density
NC	1.13 - 2.38	> 2.38
sc	2.64 -13.97	> 13.97
GA	6.14 - 11.34	> 11.34



Selection Criteria-PFRU

 Divided beach nesting densities into five regions based on genetics groups by State and selected beaches that were within the top 25 % (highest nesting densities. Beaches adjacent to them encompass the majority of nesting within the Peninsula Florida Recovery Unit.

State	Medium Nesting Density	High Nesting Density
Northern Florida	9.35 – 12.85	> 9.35
Central Eastern Florida	96.85 – 428.32	> 137.32
Southeastern Florida	91.95 – 333.10	> 86.28
Southwestern Florida	14.38 – 24.29	> 14.19
Central Western Florida	16.67 – 67.98	> 14.53

We include beaches on two Florida keys to ensure conservation of the unique nesting habitat in this area.



Selection Criteria- GOMRU

 Divided beach nesting densities into four equal groups by State and selected beaches that were within the top 25 % (highest nesting densities. Beaches adjacent to them encompass the majority of nesting within the GOMRU.

State	Mean Nesting Density	High Nesting Density
FL	1.15	> 1.15
AL	0.64 -1.56	> 1.15
MS	0.06 - 1.5	> 1.15



Selection Criteria- DTRU

- All islands west of Key West, Florida, where loggerhead nesting has been documented due to the extremely small size of this Recovery Unit;
- Selected beaches: Bush Key, East Key, Garden Key, Hospital Key, and Loggerhead Key in the Dry Tortugas National Park and Boca Grande Key, Woman Key, and four unnamed keys in the Marquesas Keys in the Key West National Wildlife Refuge;



Proposed Areas Designated

FWS proposed 1,190km (739 miles) in 90 units Land ownership: Federal (19%), State (21 %), and private and others (local governments (60%).

State	# of CH Units	Miles	Percent of Total
North Carolina	8	96	13
South Carolina	22	79	11
Georgia	8	69	9
Florida	47	451	61
Alabama	3	18	2
Mississippi	2	26	4
Total	90	739	100



Draft Economic Analysis of the Proposed Terrestrial Critical Habitat Designation

ESA requires designation of critical habitat...on the basis of the best scientific data and after taking into consideration the economic impact, the impact on national security, and any other relevant impact,.... Areas may be excluded if the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless failure to designate such area as critical habitat results in extinction of the species.

- The DEA was prepared by independent consultants, IEc.
- IEc contacted Federal and State agencies.
- Estimates the economic impacts likely to occur.
- IEc incorporate public comments in Final EA for use in the final critical habitat designation.

Draft Economic Analysis

Estimated Incremental Impacts of Proposed Critical Habitat Designation

	Annualized			
State	USFWS	Other Federal	Non-Federal	Total
NC	\$7,000	\$11,000	\$7,600	\$26,000
SC	\$1,700	\$2,500	\$1,900	\$6,100
GA	\$1,700	\$1,900	\$1,600	\$5,300
FL	\$29,000	\$42,000	\$29,000	\$100,000
MS	\$89	\$100	\$110	\$300
AL	\$4,300	\$6,500	\$5,400	\$16,000
Total	\$43,000 (28%)	\$64,000 (42%)	\$460,000 (30%)	\$150,000

Excluded and Exempt Areas

- Potential Excluded areas: Proposed critical habitat areas in St. Johns, Volusia, and Indian River Counties, Florida, that are covered under ESA section 10(a)(1)(B) habitat conservation plans that are being considered for exclusion.
- Areas to be exempt: DOD installations Marine Corps Base Camp Lejeune (Onslow Beach), Cape Canaveral Air Force Station, Patrick Air Force Base, and Eglin Air Force Base (Cape San Blas).

NOTE: Areas were not included because they did not meet the selection criteria: areas of low density; man-made structures such as groins, jetties, and piers.



Critical Habitat Does NOT

- Create a wildlife refuge, reserve or park.
- Affect private landowners who are not using Federal money or do not require Federal permits.
- Create a new, independent review process (potential impacts to critical habitat are reviewed at the same time as potential impacts to listed species).



What is the Regulatory Impact of a Critical Habitat Designation?

- Federal agencies are required to consult with the Service to ensure that their actions will not destroy or adversely modify critical habitat. Federal actions include activities that are funded or permitted by Federal agencies.
 - NOTE: Federally endangered or threatened species are protected under the ESA <u>regardless</u> of whether or not they have designated critical habitat.





Adverse Modification v. Jeopardy

Under section 7(a)(2), all Federal agencies must ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species, or destroy or adversely modify its designated critical habitat.

Adverse modification focuses on the habitat needed to recover the species (whether or not that habitat is the main limiting factor at present).

-- Can overlap where "reproduction, numbers or distribution" are habitat-limited.



Timeline of Loggerhead Critical Habitat proposed rule

- March 25, 2013 FWS published proposed rule for terrestrial critical habitat. 60 day comment period.
- July 18, 2013- FWS published Notice of Availability of the Draft Economic Analysis and reopened the comment period.
- September 16, 2013 Comment period closed.
- July 18, 2013- NOAA Fisheries published proposed rule for inwater critical habitat.
- Final rule is expected to be published together- expected in July 2014.





