

West Florida Seagrass Beds IMMA

Description:

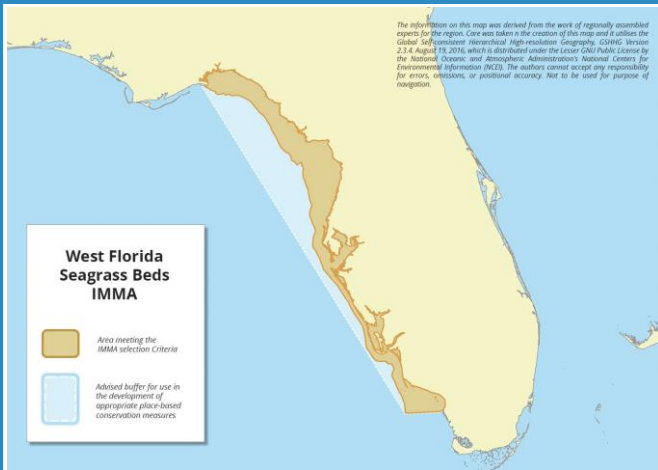
The West Florida Seagrass Beds IMMA includes multiple areas along the west coast of Florida. Defined by a 10 m isobath line that traces the coastline, the IMMA includes various aquatic habitats along the coast and inland waterways. This includes thermal basins, springs, creeks, dredged canals, and warm-water discharge sites of power plants where waters typically remain above 20°C and which are visited by large numbers of manatees predictably and consistently (Valade et al., 2020).

Criterion A: Species or Population Vulnerability

The American Manatee (*Trichechus manatus*) as a species has been listed as Endangered on the IUCN Red List of Threatened Species (Deutsch & Morales-Vela, 2024). The Florida Manatee (*Trichechus manatus latirostris*) is a subspecies of the American manatee that has not yet been assessed by the IUCN Red List.

Criterion B: Distribution and Abundance Sub-criterion B1: Small and Resident Populations

Several small and resident populations of common bottlenose dolphins (*Tursiops truncatus*) occur along Florida's western/Gulf of Mexico coast. These form part of the "northern Gulf of Mexico bay, sound, and estuary stocks", of which at least eight stocks are currently recognized by NOAA Fisheries: Waccasassa Bay/Withlacoochee Bay/Crystal Bay, St. Joseph Sound/Clearwater Harbor, Tampa Bay, Sarasota Bay/Little Sarasota Bay, Pine Island Sound/Charlotte Harbor/Gasparilla Sound/Lemon Bay,



Area Size

15,288 km²

Qualifying Species and Criteria

Florida Manatee – *Trichechus manatus latirostris*

Criterion A; B (2)

Common bottlenose Dolphin – *Tursiops truncatus*

Criterion B (1)

Summary

The West Florida Seagrass Beds IMMA extends along the west coast of Florida, USA. It includes coastal waters up to the 10 m contour line, as well as many bays and inlets and seagrass beds. Thermal basins, springs, creeks, dredged canals, and warm-water discharge sites of power plants, where waters typically remain above 20°C, are regularly visited by large numbers Endangered Florida manatees (*Trichechus manatus latirostris*), which also feed on the extensive seagrass beds in the IMMA. The area also hosts several small resident populations of bottlenose dolphins, many of which have been extensively studied for several decades. There are a variety of protected areas across the region, some designated specifically for protecting Florida manatees, including Manatee Park, Crystal River Wildlife Refuge, TECO power plant.



Figure 1: Common bottlenose dolphins (*Tursiops truncatus*), observed in coastal waters of Everglades National Park within the IMMA. Photo credit: Jeremy Kiszka (Florida International University).



Figure 2: Common bottlenose dolphins (*Tursiops truncatus*), observed in coastal waters of the Gulf of Mexico in the Everglades National Park. Photo credit: Jeremy Kiszka (Florida International University).



Figure 3: Florida Manatee (*Trichechus manatus latirostris*). Photo credit: Beth Brady / Save the Manatee Club.



Figure 4: A pair of Florida Manatees (*Trichechus manatus latirostris*). Photo credit: Beth Brady / Save the Manatee Club.

Caloosahatchee River, Estero Bay, and Chokosloskee Bay/Ten Thousand Islands/Gullivan Bay (NMFS, 2021). Long-term residency has been documented through extensive long-term photo identification studies in Tampa Bay (Wells, 1986; Urian et al., 2009), Sarasota Bay (Irvine & Wells, 1972; Wells, 1986; Scott et al., 1990), Lemon Bay (e.g., Bassos-Hull et al., 2013), and Charlotte Harbor/Pine Island Sound (Shane, 1990; Bassos-Hull et al., 2013). In Sarasota Bay, up to five concurrent generations have been identified through over more than four decades (Wells, 2014).

Sub-criterion B2: Aggregations

Aerial surveys to estimate abundance of manatees in Florida conducted in 2021-2022

(<https://myfwc.com/research/manatee/research/population-monitoring/synoptic-surveys/>) yielded an estimate of 9,790, of which 3,960-5,120 occurred on the west coast of Florida in the waters encompassed in this IMMA (Gowan et al., 2023). Manatees are vulnerable to cold stress, and their survival depends on the use of warm-water refuges resulting from discharge of power plants and passive thermal basins, springs, creeks, and dredged canals, particularly in inland freshwater bodies, and on the presence of seagrass meadows (Laist et al., 2013; Valade et al., 2020). Long-term monitoring through aerial surveys indicates the presence of large aggregations (50 to more than 500) of Florida manatees in four key wintering sites in the IMMA (Laist & Reynolds, 2005; Laist et al., 2013) including Crystal River, TECO power plant, and Manatee Park (Deutsch et al., 2003; Martin et al., 2015; Gowan et al., 2023). Along the coastline, extensive seagrass meadows provide the main feeding grounds for this species. Manatees primarily forage on Eelgrass (*Halodule wrightii*) and *Syringodium filiforme*, which are concentrated in intracoastal waters around the State, from Florida Bay to the Florida Panhandle along the Gulf Coast (Zieman & Zieman, 1989).

Supporting Information

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Acknowledgements

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PDF made available for download at
<https://www.marinemammalhabitat.org/factsheets/west-florida-seagrass-beds-imma/>