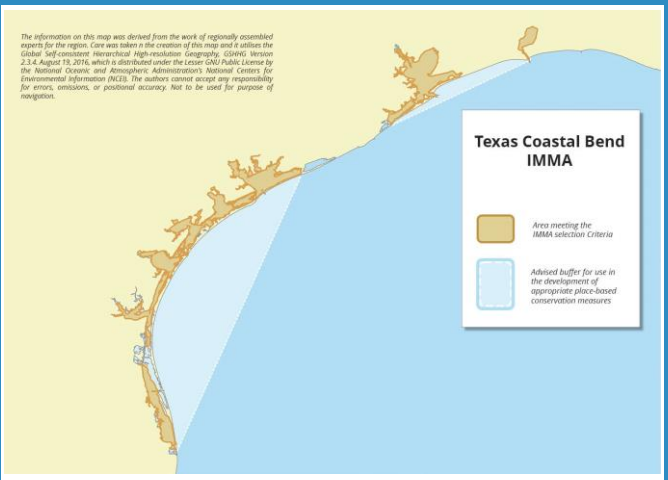

Area Size

5,475 km²

Qualifying Species and Criteria

Common bottlenose dolphin –

Tursiops truncatus

Criterion B (1, 2)

Summary

The Texas Coastal Bend IMMA encompasses bays and estuaries along the northern Gulf of Mexico from Port Isabel in the south to Corpus Christi Bay, Aransas and Copano Bay, St. Antonio bay, Matagorda, Galveston bay and Sabine lake in the north. The IMMA extends to the 5 m contour line offshore. These bays and estuaries, which include seagrass meadows and mangrove channels host high densities of common bottlenose dolphins (*Tursiops truncatus*), some of which form small resident populations, but many of which are non-resident and known to roam more widely, with resident and non-resident populations frequently mixing.

Texas Coastal Bend IMMA

Description:

The habitats within the IMMA include seagrass meadows and mangrove channels, and are under considerable human impact from large port infrastructures, particularly in Corpus Christi and Galveston, and pollution from both port activities and runoff due to the presence of agricultural lands throughout the coastline of Texas.

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

Long-term photo identification studies in multiple sites within the IMMA indicate that there are resident populations of common bottlenose dolphins (*Tursiops truncatus*) (from south to north) in the Matagorda-Espiritu Santo Bay area (Gruber, 1981; Lynn & Würsig, 2002), Aransas Pass (Shane, 1977; Weller, 1998), San Luis Pass (Maze & Würsig, 1999; Irwin & Würsig, 2004), and Galveston Bay (Bräger, 1993; Bräger et al., 1994; Fertl, 1994; Fazioli & Mintzer, 2020). However, mixing of residents and non-residents is known to occur, at least in San Luis Pass (Maze & Würsig, 1999). Most dolphins in the mouths of Galveston Bay and Port Aransas, for example, are considered transients (Weller, 1998).

Sub-criterion B2: Aggregations

At least seven discrete Bays, Sounds and Estuaries (BSE) stocks of common bottlenose dolphins recognized by NOAA Fisheries are included in this IMMA: Laguna Madre, Nueces Bay/Corpus Christi Bay, Copano Bay/Aransas Bay/San Antonio Bayt/Redfish Bay/Espiritu Bay, Matagorda Bay/Tres

Figure 1: Common bottlenose dolphins (*Tursiops truncatus*) observed in the Texas Coastal Bend IMMA.
Photo credit: Jeremy Kiszka (Florida International University).

Figure 2: Common bottlenose dolphin (*Tursiops truncatus*) observed within the IMMA with an injury on its head .
Photo credit: Makayla Guinn (Texas A&M University-Corpus Christi).

Palacios Bay/Lavaca Bay, West Bay, Galveston Bay/Trinity Bay, and Sabine Lake (NMFS, 2021).

Bottlenose dolphins in these systems are very common, and the combined abundance for all stocks is probably several thousand individuals. The most recent abundance estimate for Galveston Bay, a stock that is considered transient, is 1,417 during the summer months (CV=0.13; 95% CI: 846-1,417) (Ronje et al., 2020).

Supporting Information

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