

the piping plover, begins and the constituent elements no longer occur are included.

Unit NC-8: Shackleford Banks. 716 ha (1769 ac) in Carteret County

The entire unit is within Cape Lookout National Seashore. This unit is in two parts: (1) The eastern end of Shackleford Banks from MLLW of Barden Inlet extending west 2.4 km (1.5 mi), including Diamond City Hills, Great Marsh Island, and Blinds Hammock; and, (2) The western end of Shackleford Banks from MLLW extending east 3.2 km (2.0 mi) from Beaufort Inlet. The unit includes all land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur and any emergent sandbars within Beaufort Inlet. This unit is bordered by Onslow Bay, Shackleford Slue, and Back Sound.

Unit NC-9: Rachel Carson. 445 ha (1100 ac) in Carteret County

The entire unit is within the Rachel Carson National Estuarine Research Reserve. This unit includes islands south of Beaufort including Horse Island, Carrot Island, and Lennox Point. This unit includes entire islands to MLLW.

Unit NC-10: Bogue Inlet. 143 ha (354 ac) in Carteret and Onslow Counties

The majority of the unit is privately owned, with the remainder falling within Hammocks Beach State Park. This unit includes contiguous land south, west, and north of Bogue Court to MLLW line of Bogue Inlet on the western end of Bogue Banks. It includes the sandy shoals north and adjacent to Bogue Banks and the land on Atlantic Ocean side to MLLW. This unit also extends 1.3 km (0.8 mi) west from MLLW of Bogue Inlet on the eastern portion of Bear Island.

Unit NC-11: Topsail. 451 ha (1114 ac) in Pender County and Hanover County

The entire area is privately owned. This unit extends southwest from 1.0 km (0.65 mi) northeast of MLLW of New Topsail Inlet on Topsail Island to 0.53 km (0.33 mi) southwest of MLLW of Rich Inlet on Figure Eight Island. It includes both Rich Inlet and New Topsail Inlet and the former Old Topsail Inlet. All land, including emergent sandbars, from MLLW on Atlantic

Ocean and sound side to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. In Topsail Sound, the unit stops as the entrance to tidal creeks become narrow and channelized.

Unit NC-12: Figure Eight Island. 134 ha (331 ac) in New Hanover County

The majority of the unit is privately owned. This unit extends south from the western end of Beach Road on Figure Eight Island to the northern end of Highway 74 on Wrightsville Beach. The unit includes Mason Inlet and the sand and mudflats northwest of the inlet from MLLW on Atlantic Ocean to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit NC-13: Masonboro. 61 ha (150 ac) in New Hanover County

The entire unit is within the North Carolina National Estuarine Research Reserve. This unit extends 1.1 km (0.70 mi) south from the MLLW of Masonboro Inlet on Masonboro Island. This unit includes all lands along the Atlantic Ocean, Masonboro Inlet, and Masonboro Sound from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit NC-14: Carolina Beach Inlet. 374 ha (924 ac) in New Hanover County

The majority of the unit is within Myrtle Grove Sound on Masonboro Island and is owned by the North Carolina National Estuarine Research Reserve. It extends 1.80 km (1.12 mi) west along the south shoreline of Wolf Island from the mouth of the Altamaha sound. This unit extends south from 3.2 km (2.0 mi) north of MLLW at Carolina Beach Inlet on Masonboro Island to 1.1 km (0.70 mi) south of MLLW at Carolina Beach Inlet on Carolina Beach. It includes land from MLLW on Atlantic Ocean across and including lands to MLLW on the western side of Masonboro Island, excluding existing dredge spoil piles. Emergent sand bars within Carolina Beach Inlet are also included.

Unit NC-15: Ft. Fisher. 790 ha (1951 ac) in New Hanover and Brunswick Counties

This unit is within Ft. Fisher State Recreation Area and Zeke's Island Estuarine Reserve. This unit extends

south from Ft. Fisher Islands (from the rocks), south of the ferry terminal, to approximately 0.8 km (0.5 mi) south of MLLW at Corn Cake Inlet on Smith Island. It includes all land (including Zeke's Island) from MLLW on Atlantic Ocean across to MLLW on the eastern side of the Cape Fear River.

Unit NC-16: Lockwood Folly Inlet. 36 ha (90 ac) in Brunswick County

The entire unit is on Oak Island (formerly known as the Town of Long Beach) and is privately owned. This unit extends from the end of West Beach Drive, west to MLLW at Lockwood Folly Inlet, including emergent sandbars south and adjacent to the island. This unit includes land from MLLW on Atlantic Ocean across to MLLW adjacent to the Eastern Channel and the Intracoastal Waterway.

Unit NC-17: Shallotte Inlet. 120 ha (296 ac) in Brunswick County

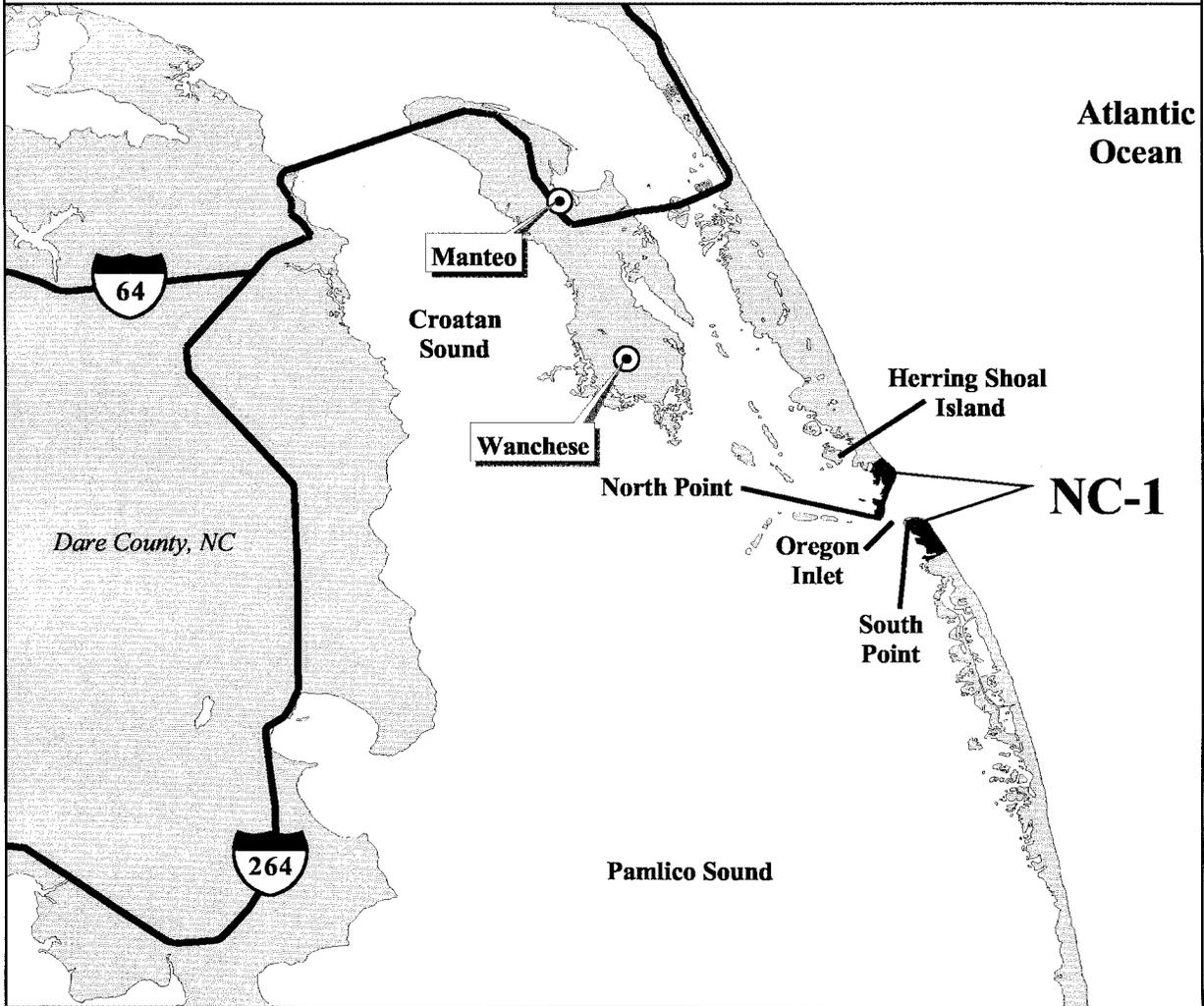
The entire unit is privately owned. This unit begins just west of Skimmer Court on the western end of Holden Beach. It includes land south of SR 1116, to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur to the MLLW along the Atlantic Ocean. It includes the contiguous shoreline from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur along the Atlantic Ocean, Shallotte Inlet, and Intracoastal Waterway stopping north of Skimmer Court Road. The unnamed island and emergent sandbars to MLLW within Shallotte Inlet are also included.

Unit NC-18: Mad Inlet. 112 ha (278 ac) in Brunswick County

The entire unit is privately owned. This unit extends west 1.2 km (0.75 mi) from the end of Main Street (SR 1177) on western Sunset Beach to the eastern portion of Bird Island and includes the marsh areas north of western Sunset Beach shoreline. The shoreline area begins at MLLW on the Atlantic Ocean and continues landward to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

BILLING CODE 4310-55-P

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



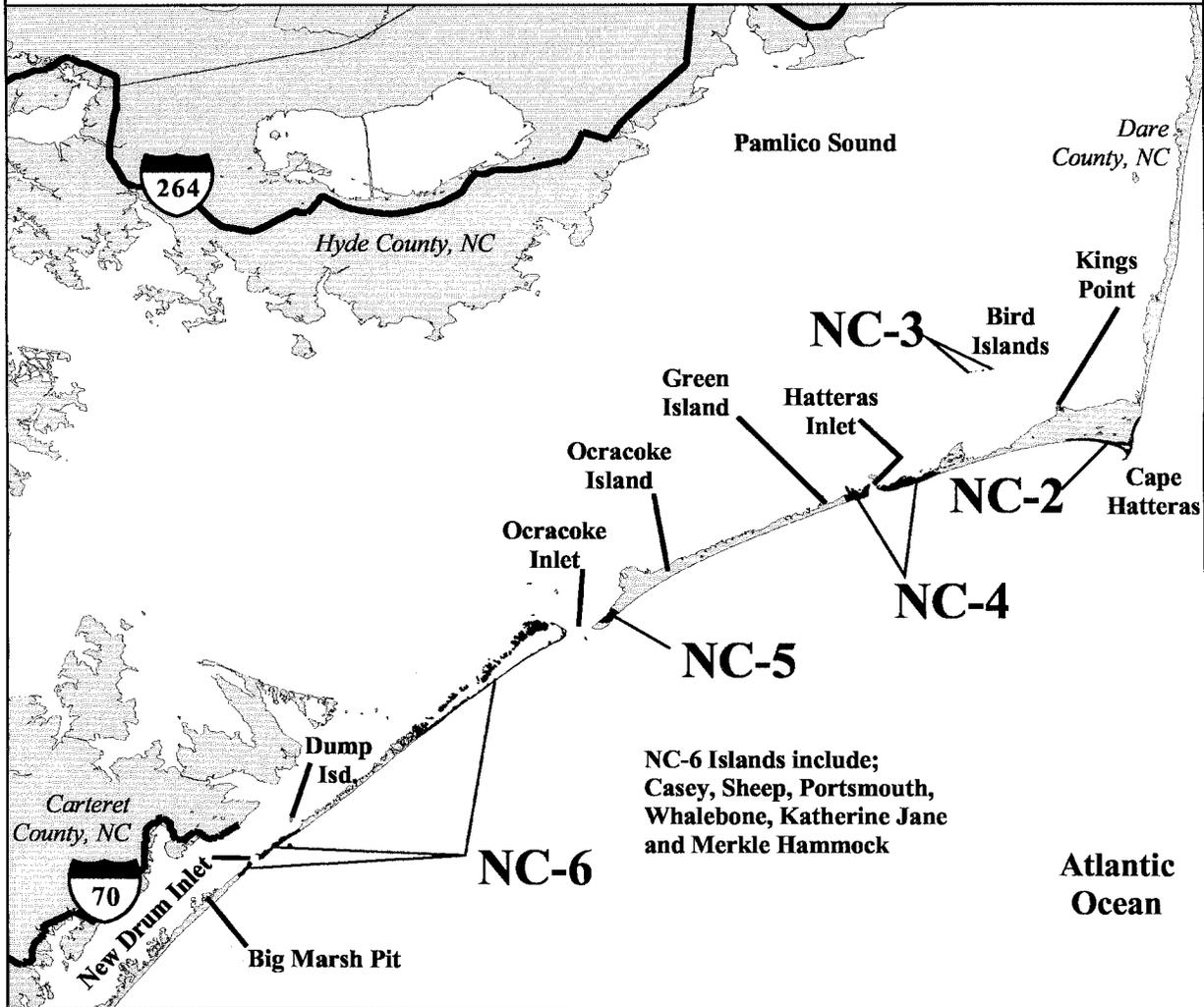
### Legend

-  City / Town
-  Major Road / Highway
-  Land
-  Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

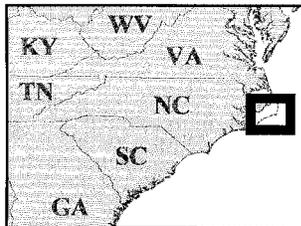
# North Carolina Unit: 1

# General locations of the designated critical habitat for the Wintering Piping Plover.



NC-6 Islands include; Casey, Sheep, Portsmouth, Whalebone, Katherine Jane and Merkle Hammock

### General Area



### Distance: Miles



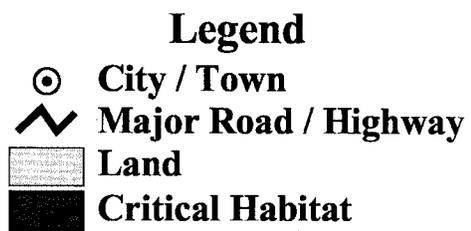
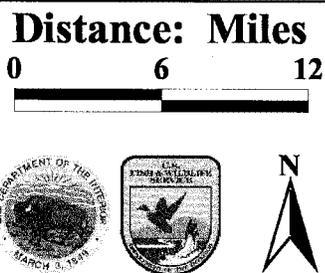
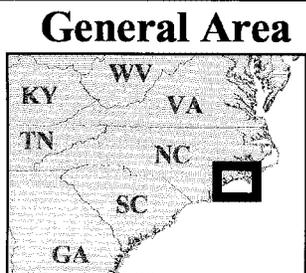
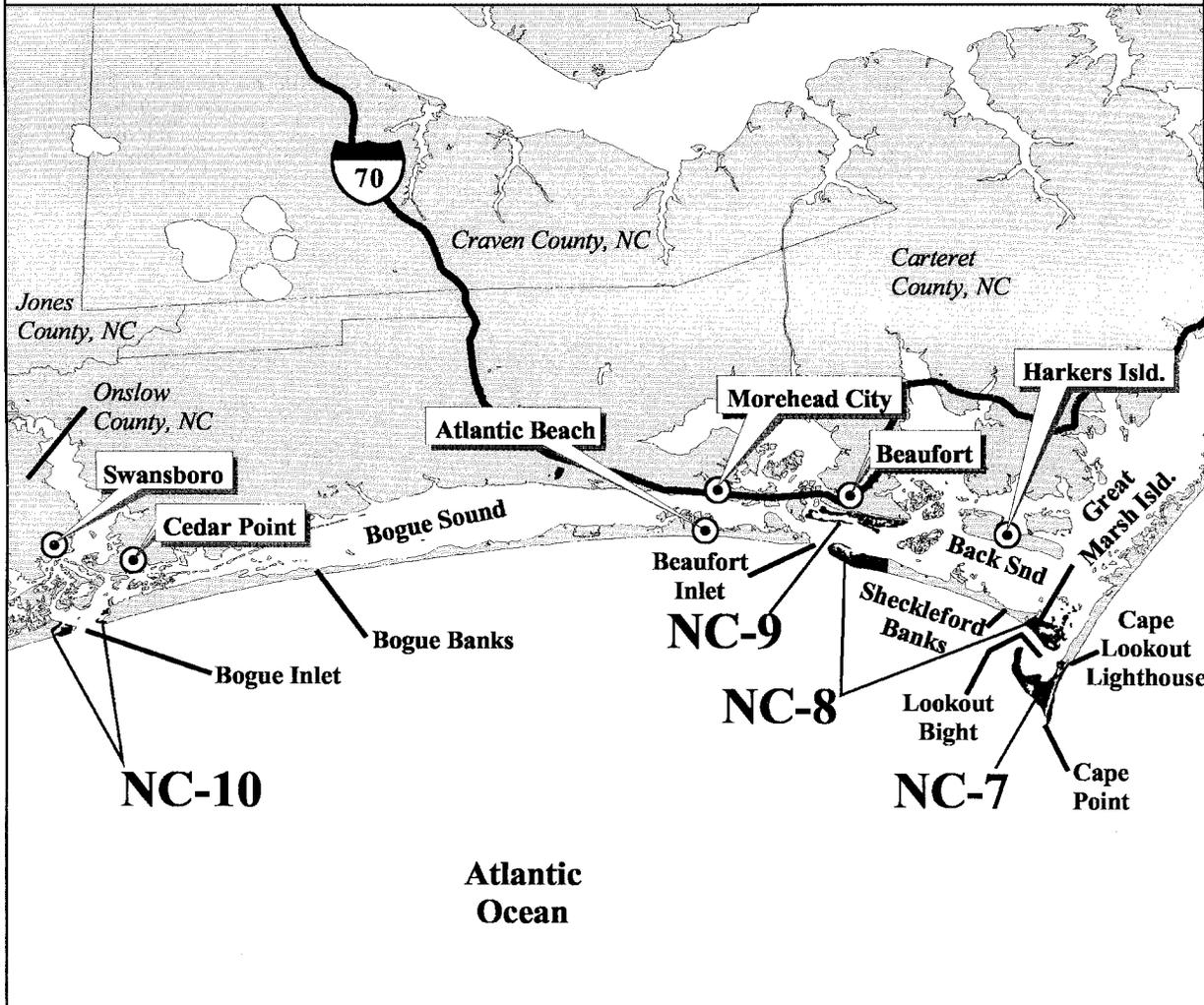
### Legend

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# North Carolina Units: 2, 3, 4, 5 & 6

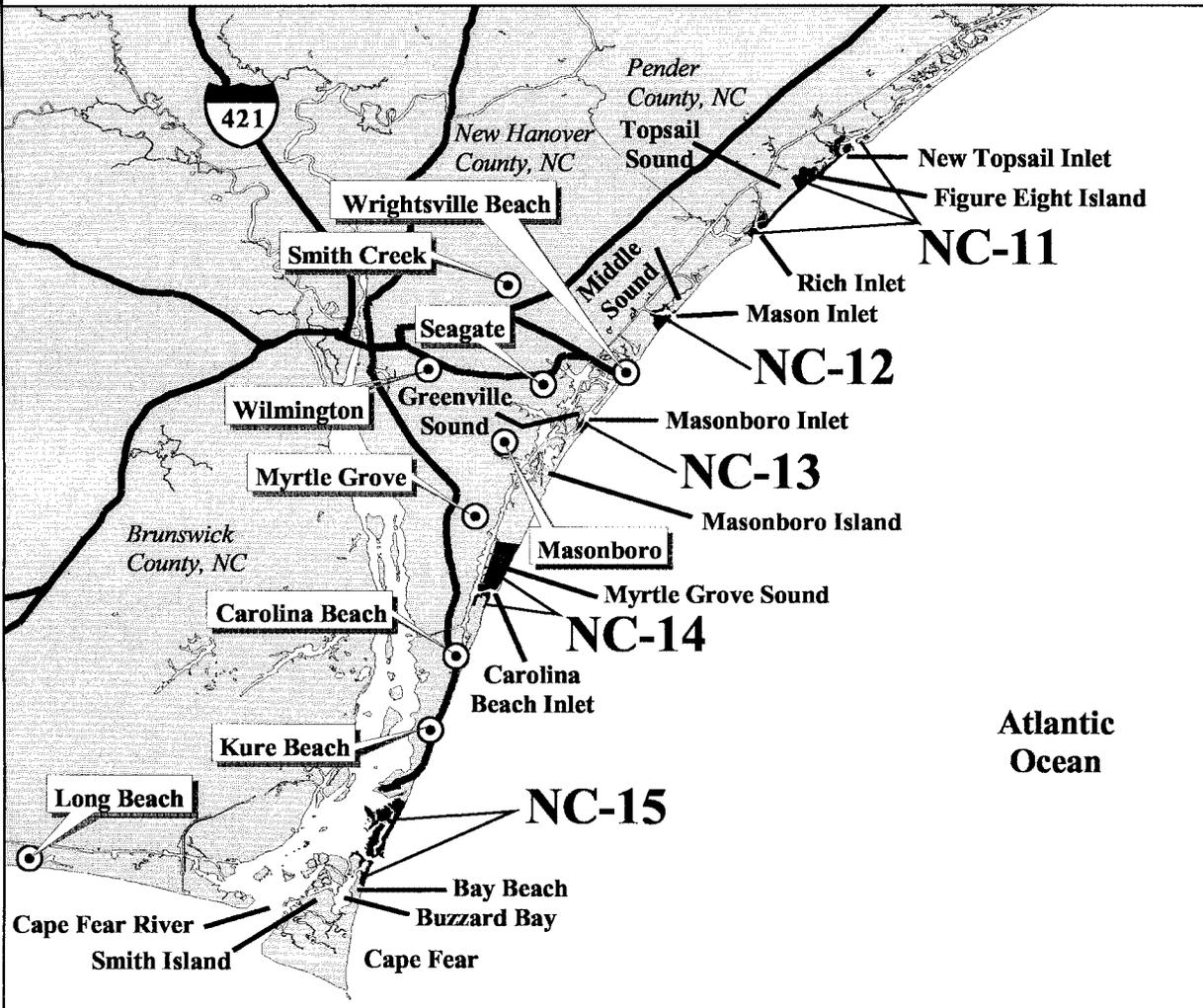
# General locations of the designated critical habitat for the Wintering Piping Plover.



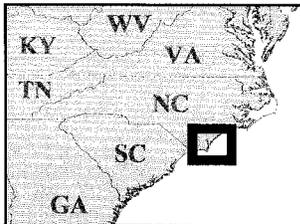
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## North Carolina Units: 7, 8, 9 and 10

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



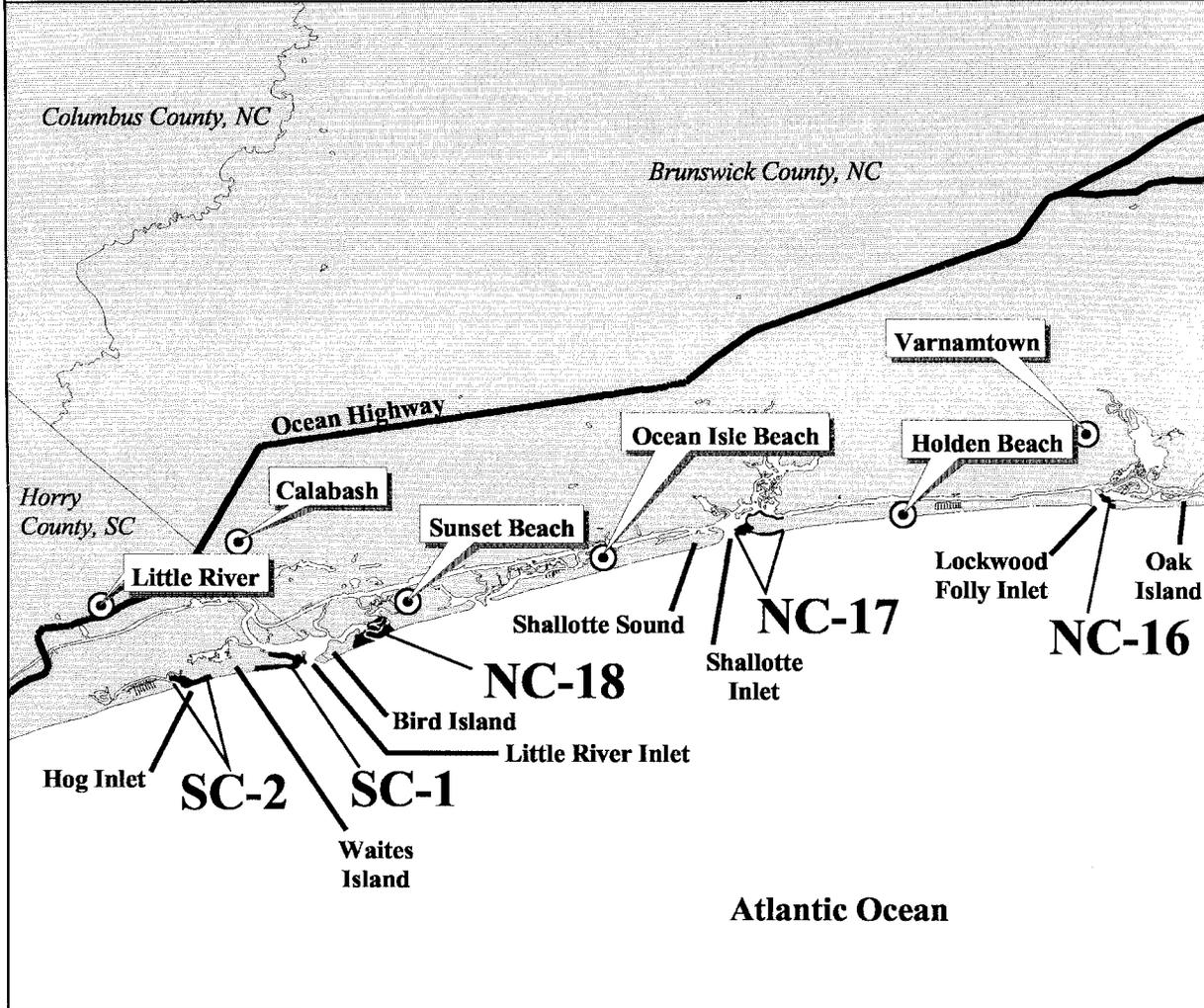
### Legend

- City / Town
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- Land
- Critical Habitat

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# North Carolina Units: 11 to 15

# General locations of the designated critical habitat for the Wintering Piping Plover.



**General Area**

**Distance: Miles**

**Legend**

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

**NC Units: 16 to 18, SC Units: 1 & 2**

*South Carolina* (Maps were digitized using 1994 DOQQs)

Unit SC-1: Waites Island-North. 75 ha (186 ac) in Horry County

This unit includes the northern tip of Waites Island from the MLLW at Little River Inlet and runs west along the Atlantic Ocean shoreline 2.0 km (1.25 mi) and includes land from the MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. The unit continues north and west of Little River Inlet stopping at Sheephead Creek, including land from MLLW to dense vegetation line. The majority of the unit is privately owned.

Unit SC-2: Waites Island-South. 58 ha (142 ac) in Horry County

This unit includes the southern tip of Waites Island from the MLLW at Hog Inlet and runs east along the Atlantic Ocean shoreline 0.80 km (0.50 mi) and includes MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. It continues north and west of the Hog Inlet, stopping at the first major tributary. Critical habitat includes from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. Emerging sandbars within Hog Inlet and adjacent to the tip of eastern Cherry Grove Beach are also included from MLLW to where densely vegetated habitat or developed structures, not used by the piping plover, begins and where the constituent elements no longer occur. The majority of this unit is privately owned.

Unit SC-3: Murrells Inlet/Huntington Beach. 135 ha (334 ac) in Georgetown County

The majority of the unit is within Huntington Beach State Park. This unit extends from the southern tip of Garden City Beach, just south of the groins (a rigid structure or structures built out from a shore to protect the shore from erosion or to trap sand) north of Murrells Inlet from MLLW to where densely vegetated habitat or developed structures, not used by the piping plover, begins and where the constituent elements no longer occur stopping perpendicular with the southern end of Inlet Point Drive. It includes from MLLW south of Murrells Inlet to the northern edge of North Litchfield Beach approximately 4.5 km (3.0 mi). The unit includes the MLLW from the Atlantic Ocean up to where

densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. The lagoon at the north end of Huntington Beach State Park is also included.

Unit SC-4: Litchfield. 11 ha (28 ac) in Georgetown County

This unit includes the southern tip of Litchfield Beach beginning 0.50 km (0.30 mi) north of Midway Inlet and stopping at the MLLW at Midway Inlet. It includes from the MLLW on the Atlantic Ocean shoreline across and including land to the MLLW on the back bayside. This unit is mostly privately owned.

Unit SC-5: North Inlet. 99 ha (245 ac) in Georgetown County

The majority of the unit is within Tom Yawley Wildlife Center Heritage Preserve. This unit extends from MLLW to 1.0 km (.62 mi) north of North Inlet on Debidue Beach. It includes shoreline on the Atlantic Ocean from MLLW to the MLLW on the western side of the peninsula. This unit also includes from the MLLW south of North Inlet 1.6 km (1.0 mi). It includes the shoreline on the Atlantic Ocean from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. It includes shoreline running south and west of the inlet from the MLLW stopping at the MLLW at the first large tributary (no name).

Unit SC-6: North Santee Bay Inlet. 305 ha (753 ac) in Georgetown County

The majority of the unit is within the Tom Yawley Wildlife Center Heritage Preserve and the Santee-Delta Wildlife Management Area. This unit is at the North Santee Bay inlet and includes lands of South Island, Santee Point, Cedar Island, and all of North Santee Sandbar. This unit includes from MLLW at North Santee Bay Inlet running north along the Atlantic Ocean side of South Island 7.2 km (4.5 mi), stopping 0.60 km (0.4 mi) north of an unnamed inlet. It includes areas from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. This unit includes the eastern side of Cedar Island adjacent to the North Santee Bay Inlet from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. All of North Santee Sandbar to MLLW is included.

Unit SC-7: Cape Romain. 315 ha (777 ac) in Charleston County

The majority of the unit is within Cape Romain National Wildlife Refuge. This unit includes the MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur on the southern and southeastern most 1.9 km (1.2 mi) portion of Cape Island, the southernmost portion of Lighthouse Island from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur, all of Lighthouse Island South to MLLW, and the southern side of the far eastern tip of Raccoon Key from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit SC-8: Bull Island. 134 ha (332 ac) in Charleston County

The majority of the unit is within Cape Romain National Wildlife Refuge and land owned by the South Carolina Department of Natural Resources. This unit includes from Schooner Creek on north and south of the river to north of Price's Inlet on the southern portion of Bull Island along the Atlantic Ocean 1.6 km (1.0 mi) and south of Price's Inlet on the northeast tip of Capers Island Heritage Preserve 1.4 km (.86 mi) along the Atlantic Ocean. All areas begin at MLLW and extend to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit SC-9: Stono Inlet. 495 ha (1223 ac) in Charleston County

Most of this unit is privately owned. It includes the eastern end of Kiawah Island (approximately 4.0 km (2.5 mi)) from MLLW on Atlantic Ocean running north to MLLW on first large tributary connecting east of Bass Creek running northeast into Stono River. It includes MLLW up to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur along Stono Inlet and River. All of Bird Key-Stono Heritage Preserve and all of Skimmer Flats to MLLW are included. The Golf course and densely vegetated areas are not included.

Unit SC-10: Seabrook Island. 117 ha (290 ac) in Charleston County

This unit runs from just 0.16 km (0.10 mi) north of Captain Sams Inlet to the southwest approximately 3.4 km (2.1 mi) along the Atlantic Ocean shoreline. It includes land areas from the MLLW on the Atlantic Ocean to where densely

vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. Most of this unit is privately owned.

Unit SC-11: Deveaux Bank. 130 ha (322 ac) in Charleston County

The entire unit is within Deveaux Bank Heritage Preserve. This unit includes all of Deveaux Island to the MLLW and is State-owned.

Unit SC-12: Otter Island. 68 ha (169 ac) in Colleton County

The majority of the unit is within St. Helena Sound Heritage Preserve. This unit includes the southern portion of Otter Island to the eastern mouth of Otter Creek. It includes the MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. The entire unit is State-owned.

Unit SC-13: Harbor Island. 50 ha (122 ac) in Beaufort County

The majority of the unit is State-owned. This unit extends from the northeastern tip of Harbor Island and includes all of Harbor Spit. It begins at the shoreline east of Cedar Reef Drive running south, stopping at the mouth of Johnson Creek. It includes the MLLW on the Atlantic Ocean and St. Helena Sound to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. All of Harbor Spit to MLLW is included.

Unit SC-14: Caper's Island. 238 ha (589 ac) in Beaufort County

Most of this unit is privately owned. This unit includes the southern-most 4.5 km (2.8 mi) along the Atlantic Coast shoreline of Little Caper's Island beginning at MLLW on south side of the

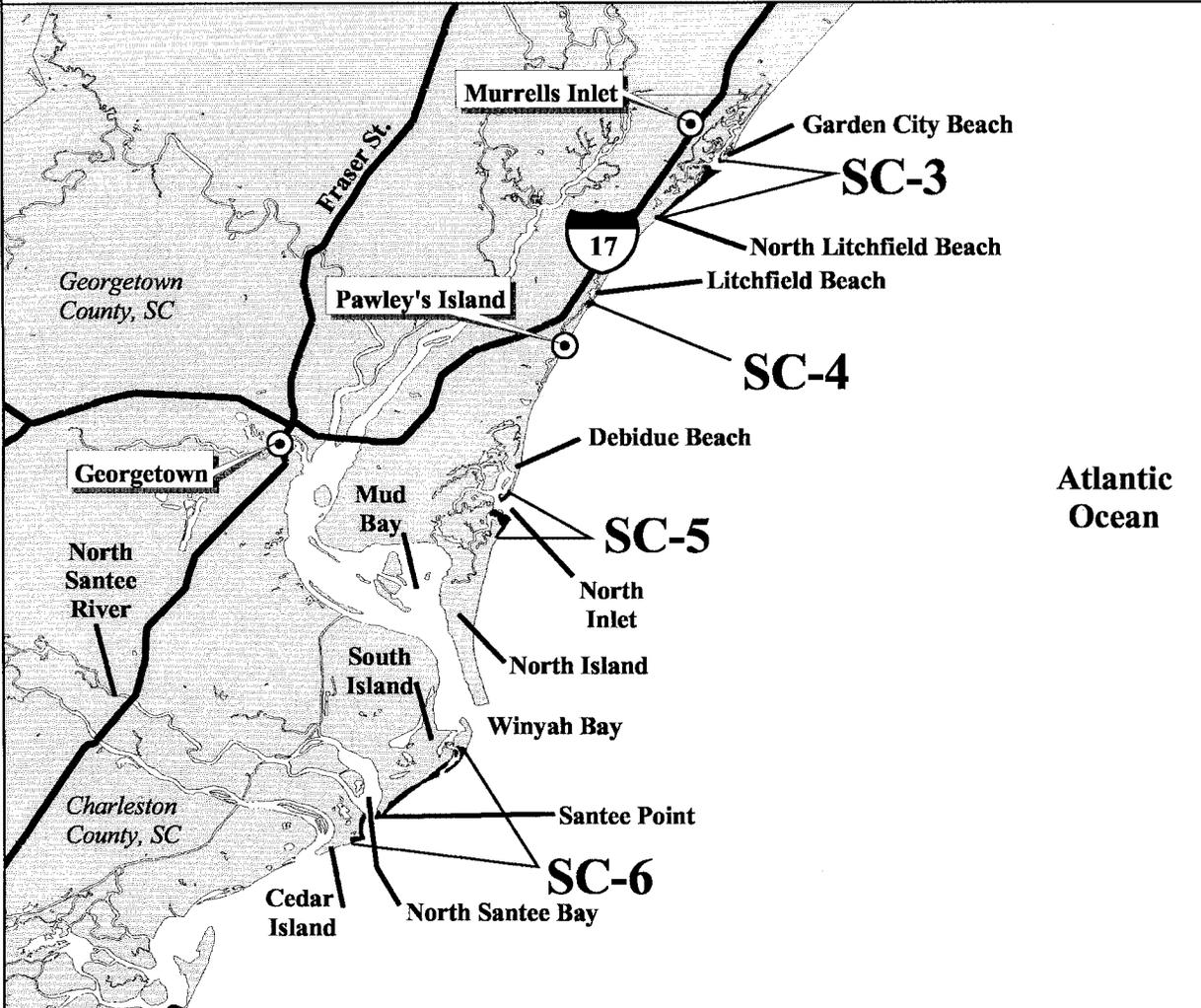
inlet (un-named). It includes the MLLW on the Atlantic Ocean shoreline to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit SC-15: Hilton Head. 43 ha (106 ac) in Beaufort County

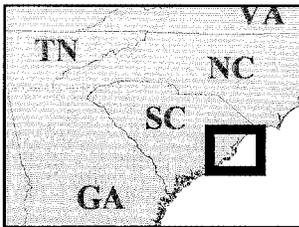
The majority of this unit is State-owned. This unit includes the northeastern tip (Atlantic Ocean side) of Hilton Head Island and all of Joiner Bank. It begins at the shoreline east of northern Planters Row and ends at the shoreline east of Donax Road. It includes the MLLW of Port Royal Sound and the Atlantic Ocean to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. All of Joiner Bank to MLLW is included.

**BILLING CODE 4310-55-P**

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



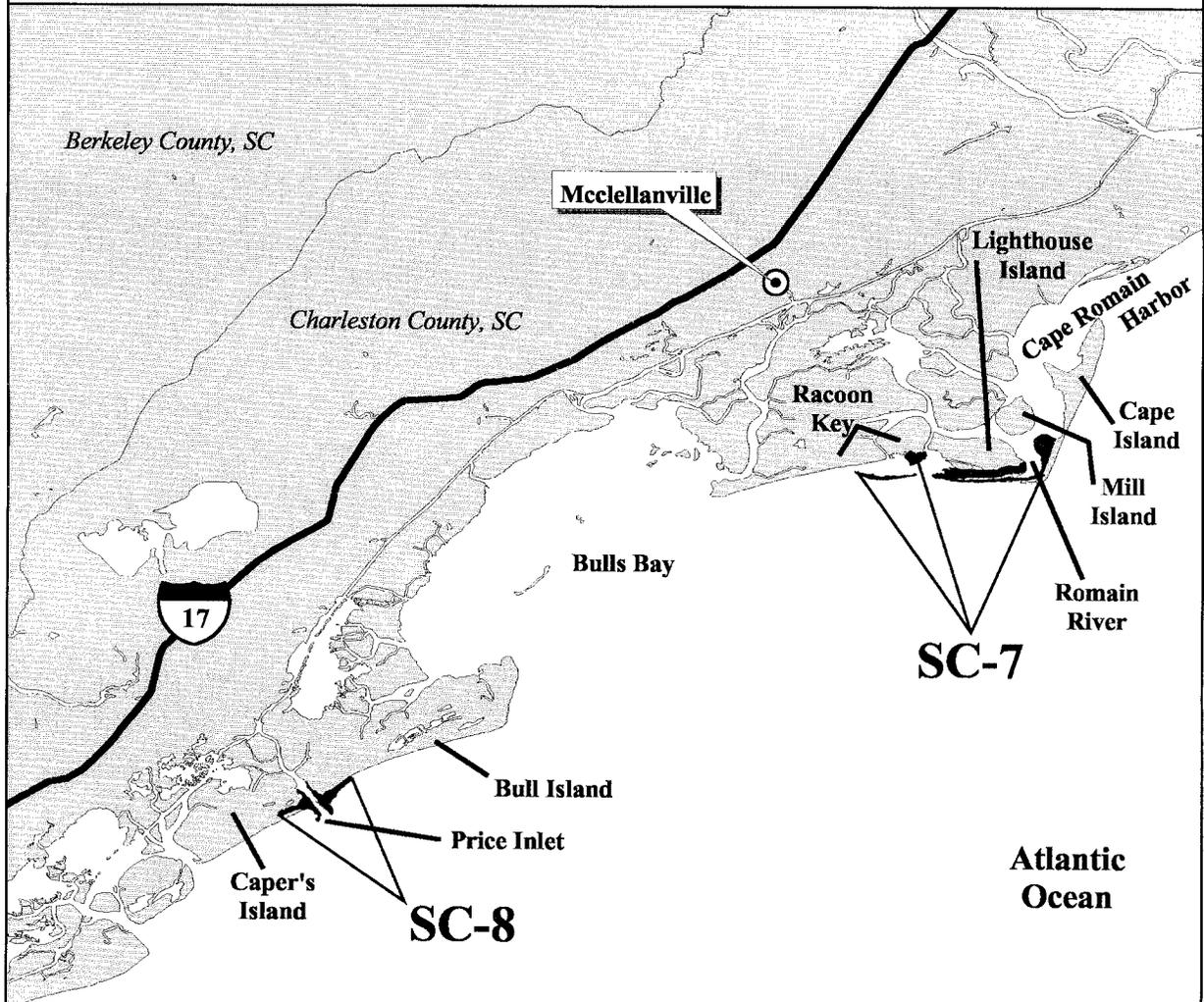
### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

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## South Carolina Units: 3, 4, 5 and 6

# General locations of the designated critical habitat for the Wintering Piping Plover.



**General Area**

**Distance: Miles**

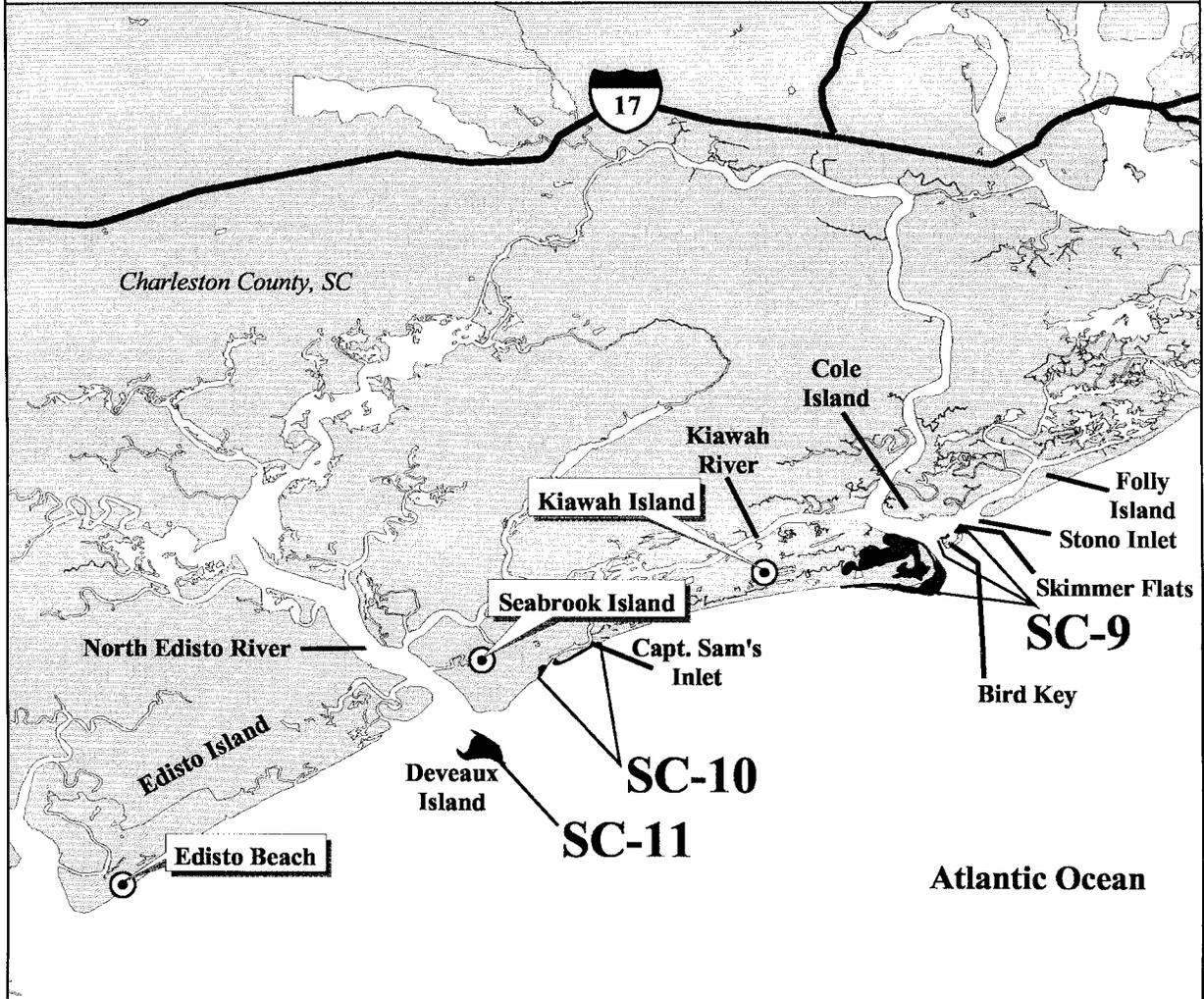
**Legend**

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

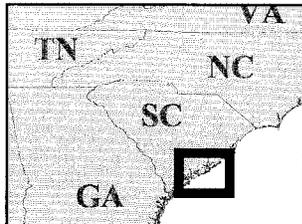
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## South Carolina Units: 7 and 8

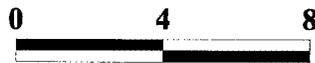
# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



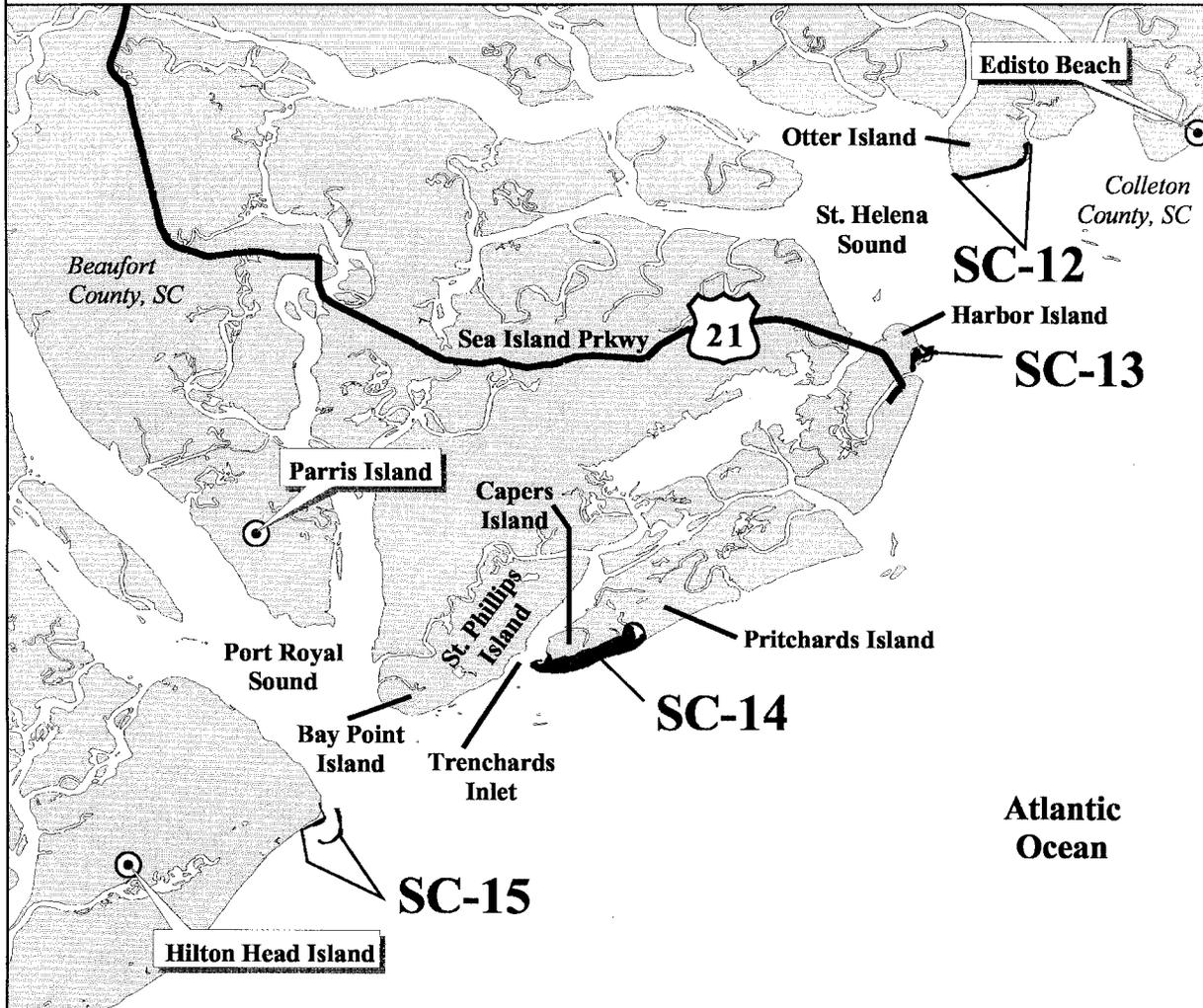
### Legend

-  City / Town
-  Major Road / Highway
-  Land
-  Critical Habitat

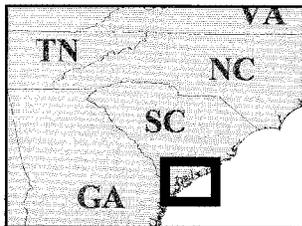
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# South Carolina Units: 9, 10 and 11

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

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## South Carolina Units: 12 to 15

*Georgia* (Maps were digitized using 1993–94 DOQQs)

Unit GA–1: Tybee Island. 37 ha (91 ac) in Chatham County

The majority of the unit is privately owned. This unit extends along the northern tip of Tybee Island starting from 0.8 km (0.5 mi) northeast from the intersection of Crab Creek and Highway 80 to 0.7 km (0.41 mi) northeast from the intersection of Highway 80 and Horse Pen Creek. The unit includes MLLW on Savannah River and Atlantic Ocean to where densely vegetated habitat or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit GA–2: Little Tybee Island. 719 ha (1776 ac) in Chatham County

The majority of the unit is within Little Tybee Island State Heritage Preserve. This unit extends just south of the first inlet to Wassaw Sound along the Atlantic Ocean coastline, extending north along the sound 1.7 km (1.1 mi). It includes habitat from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–3: North Wassaw Island. 108 ha (267 ac) in Chatham County

The entire unit is within Wassaw National Wildlife Refuge. This unit includes the north-east tip of Wassaw Sound, 1.6 km (1.0 mi) along the inlet side and extending south along the Atlantic Ocean shoreline for 1.6 km (1.0 mi). It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–4: South Wassaw Island. 61 ha (151 ac) in Chatham County

The entire unit is within Wassaw National Wildlife Refuge. This unit extends from the last southern 1.6 km (1.0 mi.) on Atlantic Ocean side, around the southern tip of Wassaw Island, up to mouth of Odingsell River. It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–5: Ossabaw Island. 434 ha (1072 ac) in Chatham County

The entire unit is within Ossabaw Island State Heritage Preserve. This unit includes the northeastern tip from the mouth of the Bradley River east and 12 km (7.5 mi) south along the Atlantic Ocean shoreline to a point 0.4 km (0.25 mi) past the south-center inlet. It

includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–6: St. Catherine's Island Bar. 54 ha (135 ac) in Liberty County

The entire unit is State owned and located east-northeast of St. Catherine's Island. This unit includes the entire St. Catherine's Island Bar to MLLW.

Unit GA–7: McQueen's Inlet. 215 ha (532 ac) in Liberty County

The majority of the unit is private land along the eastern-central coastline on St. Catherine's Island. This unit extends from McQueen's Inlet north approximately 3.5 km (2.2 mi) and south approximately 1.8 km (1.1 mi). It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–8: St. Catherine's Island. 60 ha (147 ac) in Liberty County

The majority of the unit is private land on the southern tip of St. Catherine's Island. This unit starts 1.2 km (0.75 mi) north of Sapelo Sound (along Atlantic Ocean shoreline) and stops inland at Brunsen Creek. It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–9: Blackbeard Island. 129 ha (319 ac) in McIntosh County

The entire unit is within the Blackbeard Island National Wildlife Refuge. This unit includes the northeastern portion of the island beginning just east of the mouth of the confluence of McCloy Creek and Blackbeard Creek and continuing east and running south along the Atlantic Ocean shoreline for 1.4 km (.90 mi). It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–10: Sapelo Island. 85 ha (210 ac) in McIntosh County

The entire unit is State-owned and within Sapelo Island. The unit extends south of Cabretta Tip approximately 0.2 km (0.13 mi) and north of Cabretta Tip 1.6 km (1.0 mi). It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–11: Wolf Island. 238 ha (590 ac) in McIntosh County

The majority of the unit is within Wolf Island National Wildlife Refuge and private lands just north of the Refuge. This unit includes the southeastern tip of Queen's island adjacent to the Doboy Sound and includes the eastern shoreline of Wolf Island. It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–12: Egg Island Bar. 61 ha (151 ac) in McIntosh County

This unit is State owned and includes all of Egg Island Bar to the MLLW.

Unit GA–13: Little St. Simon's Island. 609 ha (1505 ac) in Glynn County

The majority of the unit is private land on Little St. Simon's Island. This unit includes the entire eastern coastline along Little St. Simon's Island. It begins 1.1 km (.70 mi) west of the northeast tip of Little St. Simon's Island and runs east and then south along the Atlantic Ocean shoreline stopping at the minor tributary (no name) on the southeast tip of Little St. Simon's Island north of Hampton Creek. It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. All of Pelican Spit to MLLW is included when this sand bar is emergent.

Unit GA–14: Sea/St. Simon's Island. 191 ha (471 ac) in Glynn County

The majority of the unit is private land on the south tip of Sea Island and on the east beach of St. Simons Island. This unit extends north of Gould's Inlet (Sea Island) 2.5 km (1.54 mi) starting just south of the groin and extends south of Gould's Inlet (St. Simons Island) 1.6 km (1.0 mi). It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit GA–15: Jekyll Island. 49 ha (121 ac) in Glynn County

The majority of the unit is within State lands on Jekyll Island. This unit includes the southern region of Jekyll Island beginning at the mouth of Beach Creek, running towards the tip of Jekyll Island and includes the shoreline running north along the Atlantic Ocean shoreline 1.9 km (1.20 mi) from the southern tip of Jekyll Island. It includes land from MLLW to where densely vegetated habitat, not used by the piping

plover, begins and where the constituent elements no longer occur.

Unit GA-16: Cumberland Island. 1454 ha (3591 ac) in Camden County

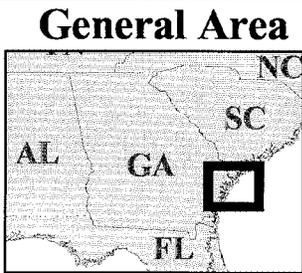
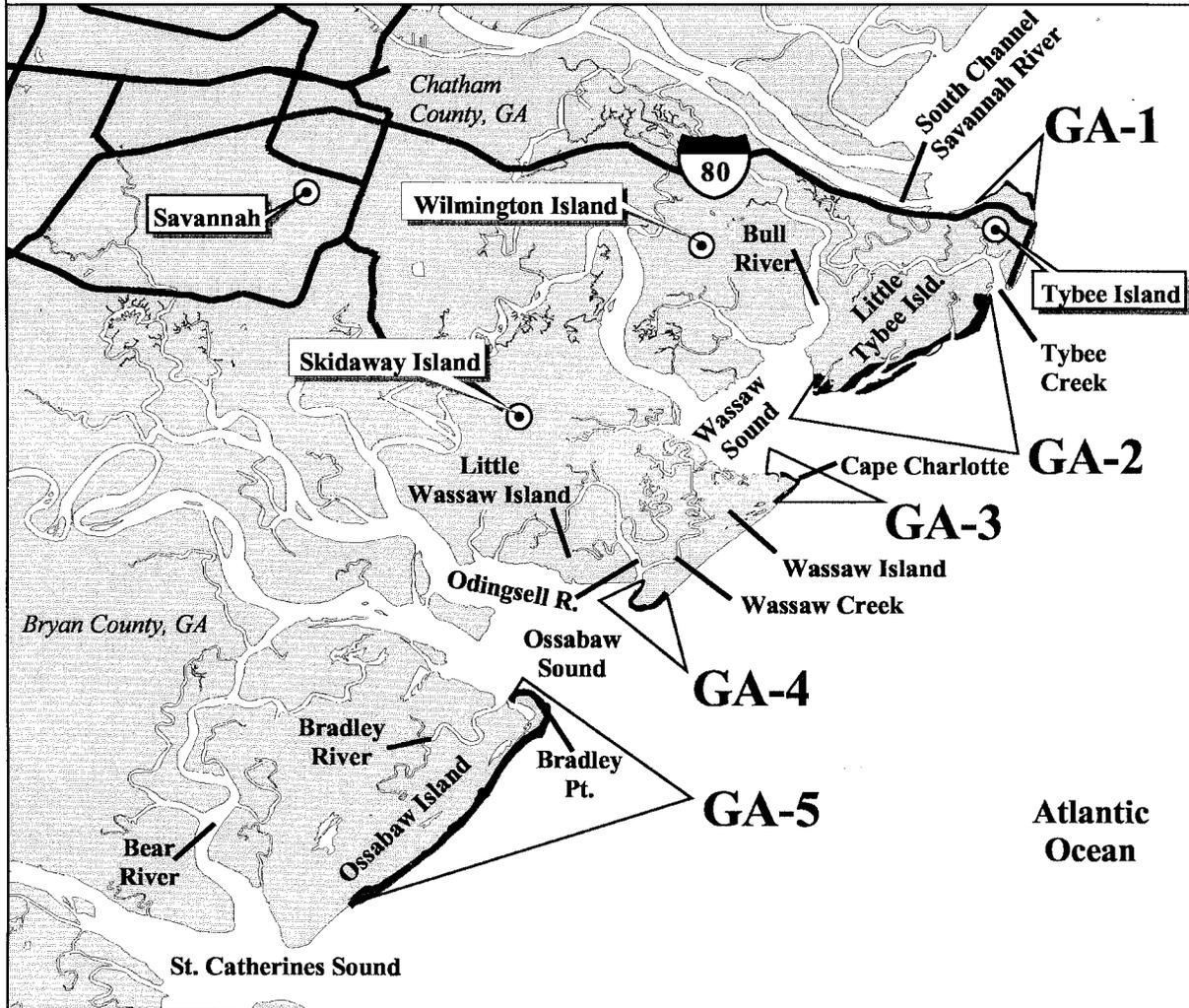
The majority of the unit is along Cumberland Island Wilderness Area and

Cumberland Island National Seashore. This unit includes the majority of the eastern Atlantic Ocean shoreline of Cumberland Island. It begins .50 km (.31 mi) north of the inlet at Long Point, continues south along the Atlantic Ocean shoreline stopping 1.8 km (1.1

mi) west of the southern tip of Cumberland Island National Seashore. It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

**BILLING CODE 4310-55-P**

# General locations of the designated critical habitat for the Wintering Piping Plover.



**Distance: Miles**



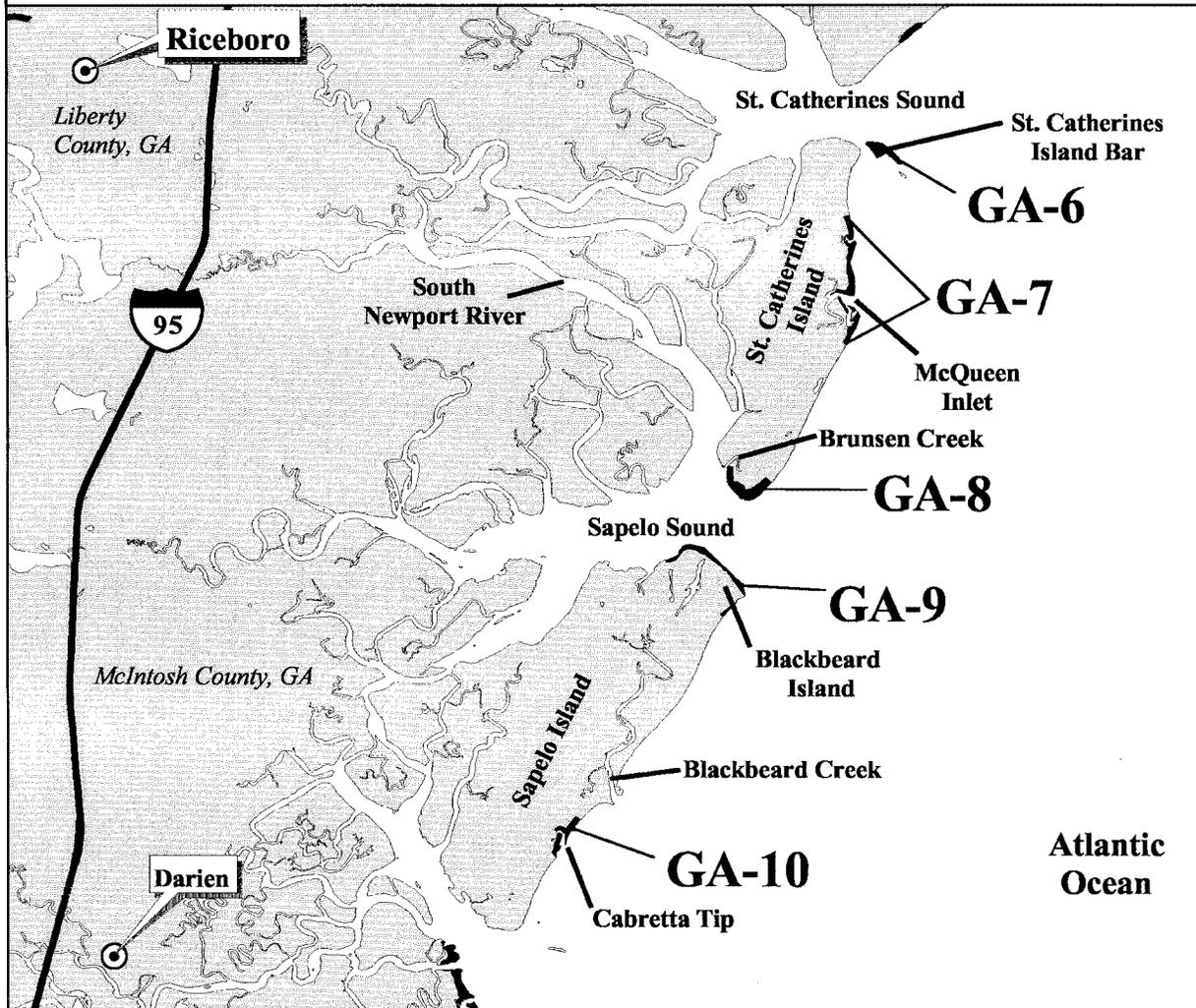
**Legend**

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

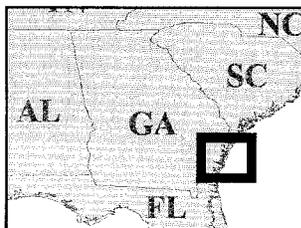
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

**Georgia Units: 1, 2, 3, 4 and 5**

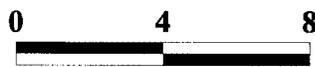
# General locations of the designated critical habitat for the Wintering Piping Plover.



**General Area**



**Distance: Miles**



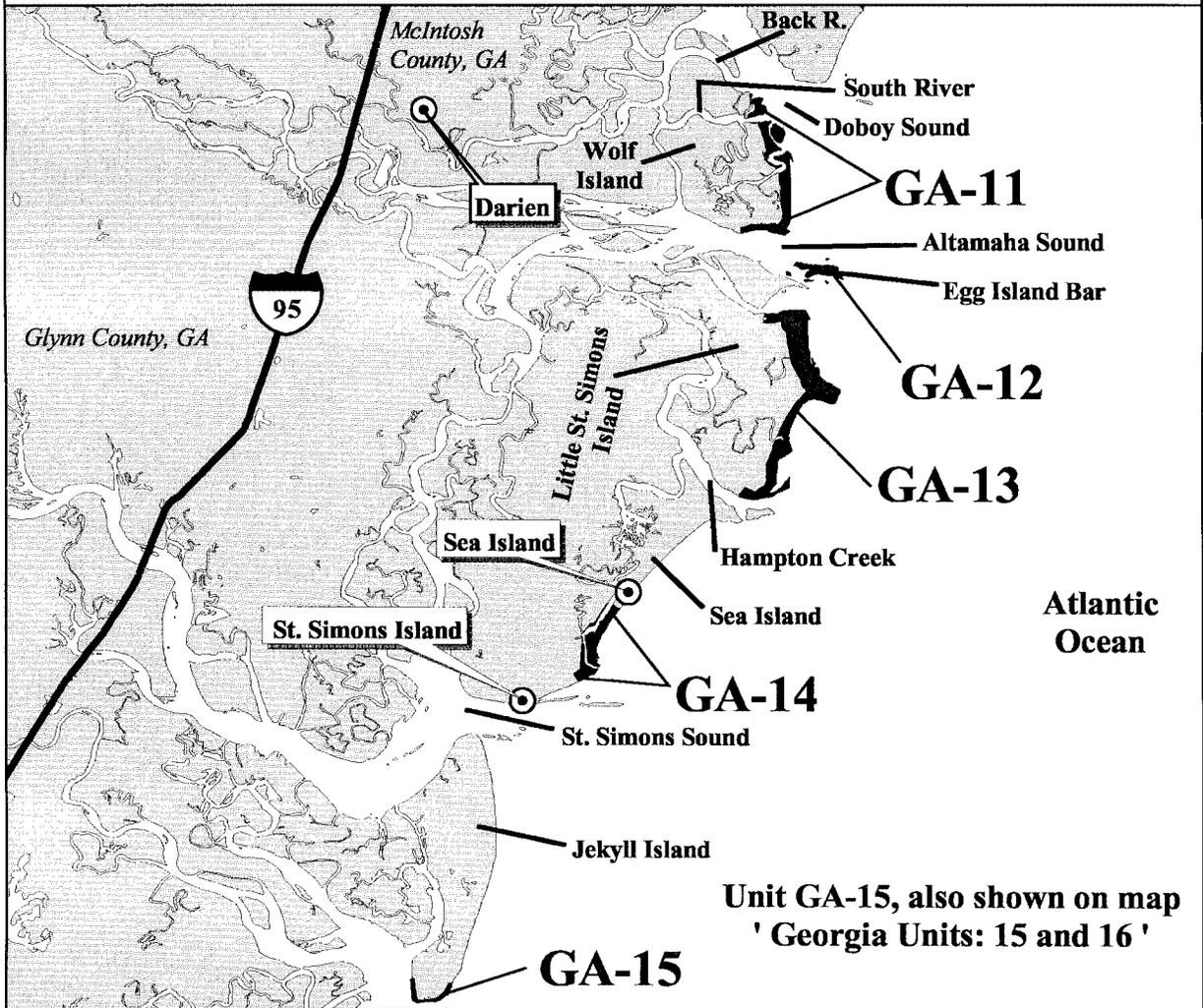
**Legend**

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

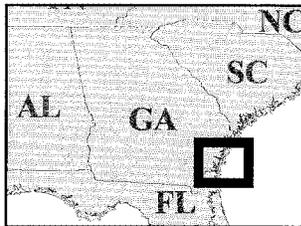
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Georgia Units: 6, 7, 8, 9 and 10

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



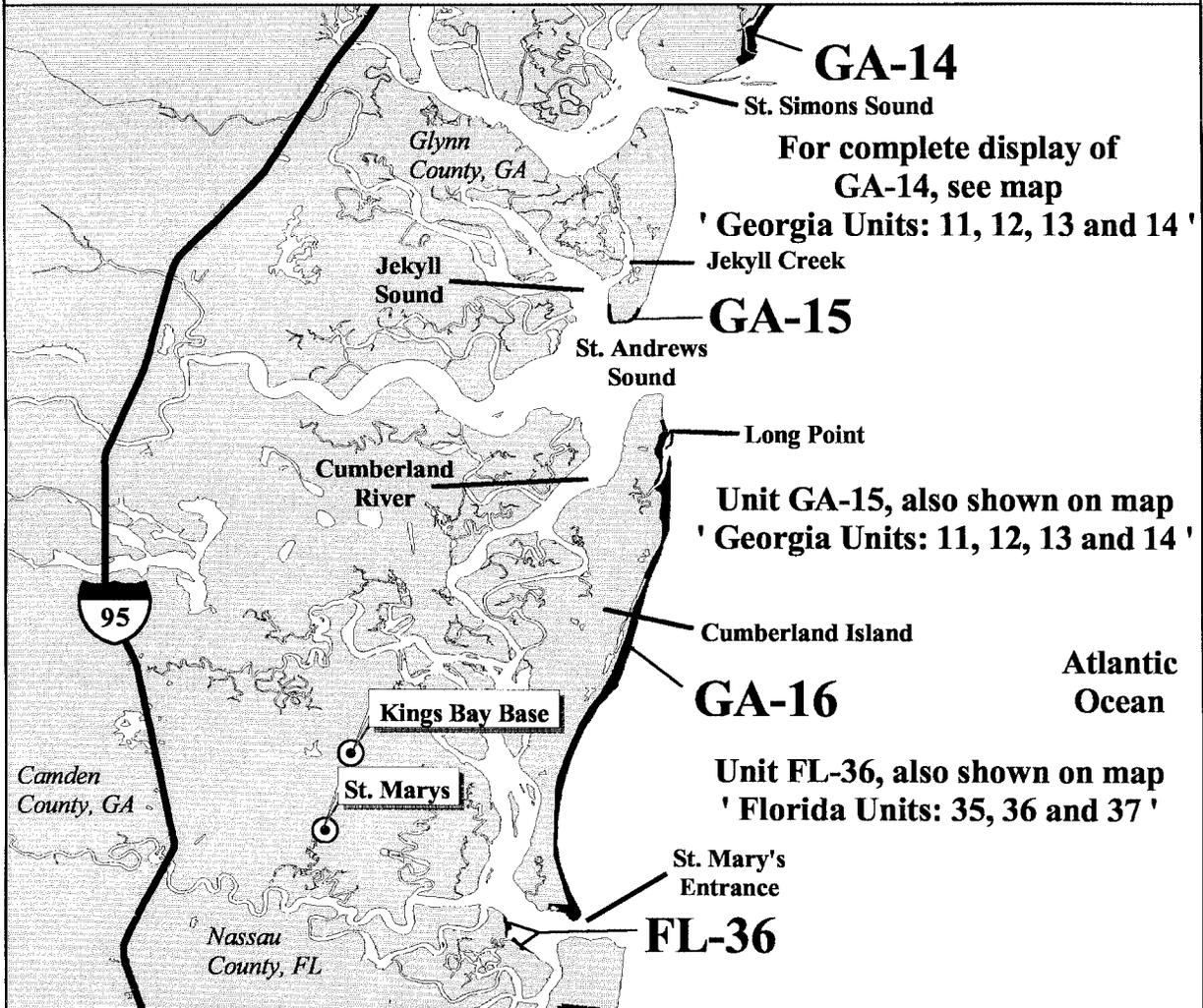
### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

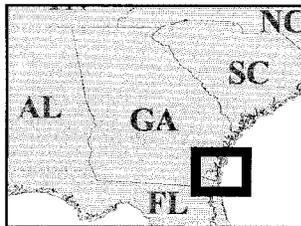
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

# Georgia Units: 11, 12, 13 and 14

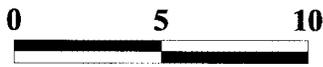
# General locations of the designated critical habitat for the Wintering Piping Plover.



**General Area**



**Distance: Miles**



**Legend**

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Georgia Units: 15 and 16

*Florida* (Maps were digitized using 1994–95 DOQQs)

Unit FL–1: Big Lagoon. 8 ha (19 ac) in Escambia County

The majority of the unit is within Big Lagoon State Recreation Area. This unit includes the peninsula and emerging sand and mudflats between 0.33 km (0.21 mi) west of the lookout tower along the shoreline and 0.24 km (0.15 mi) east of the lookout tower along the shoreline. Land along the shoreline from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. All emerging sandbars to MLLW are included.

Unit FL–2: Big Sabine. 182 ha (450 ac) in Escambia County

The majority of the unit is owned by the University of West Florida. This unit includes areas adjacent to Santa Rosa Sound of Big Sabine Point and adjacent embayment between 8.0 km (5.0 mi) and 11.6 (7.2 mi) east of the Bob Sike's Bridge. It begins 0.10 km (.06 mi) north of SR 399 to MLLW on the Santa Rosa Sound.

Unit FL–3: Navarre Beach. 48 ha (118 ac) in Escambia and Santa Rosa Counties

The majority of the unit is owned by Eglin Air Force Base and Santa Rosa Island Authority. This unit includes lands on Santa Rosa Island Sound side, between 0.09 and 0.76 mi east of the eastern end of SR 399 to MLLW on Santa Rosa Sound side.

Unit FL–5: Shell/Crooked Islands. 1789 ha (4419 ac) in Bay County

The majority of the unit is within Tyndall Air Force Base and St. Andrews State Recreation Area. This unit includes all of Shell Island, Crooked Island West, and Crooked Island East from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL–6: Upper St. Joe Peninsula. 182 ha (449 ac) in Gulf County

The majority of the unit is within St. Joseph State Park. This unit includes the northern portion of the peninsula from the tip to 8.0 km (5.0 mi) south along the Gulf of Mexico from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL–7: Cape San Blas. 158 ha (390 ac) in Gulf County

The entire unit is within Eglin Air Force Base. This unit includes the area known as the Cape between the eastern boundary of Eglin and mile marker 2.1, including the peninsula and all emerging sandbars. It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL–8: St. Vincent Island. 146 ha (361 ac) in Franklin County

The majority of the unit is within St. Vincent National Wildlife Refuge. This unit includes the western tip of St. Vincent Island that is adjacent to Indian Pass (0.80 km (0.50 mi) east of tip along Indian Pass, and 1.9 km (1.2 mi) from tip southeast along Gulf of Mexico). The unit also includes St. Vincent Point from the inlet at Sheepshead Bayou east 1.6 km (1.0 mi) to include emerging oysters shoals and sand bars and extends south 0.21 km (0.13 mi) of St. Vincent Point. The unit includes the southeastern tip of St. Vincent Island extending north 1.4 km (0.90 mi) and south and west 2.1 km (1.3 mi). The western tip of Little St. George Island 0.80 km (0.50 mi) from West Pass is included (state owned lands). All sections of this unit include land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL–9: East St. George Island. 1433 ha (3540 ac) in Franklin County

The majority of the unit is within St. George State Park. This unit begins 5.3 km (3.3 mi) east of the bridge and extends to East Pass. Shell Point, Rattlesnake Cove, Goose Island, East Cove, Gap Point, and Marsh Island are included. This unit includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur on the Gulf of Mexico, East Pass and St. George Sound.

Unit FL–10: Yent Bayou. 153 ha (378 ac) in Franklin County

The majority of the unit is State owned. This unit is adjacent to the area known as Royal Bluff. It includes the St. George Sound shoreline between 5.9 km (3.7 mi) and 9.5 km (5.9 mi) east of SR 65. It includes from MLLW to where densely vegetated habitat or developed structures such as SR 65, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL–11: Carabelle Beach. 56 ha (139 ac) in Franklin County

The area within this unit is privately owned. This unit is the peninsula created by Boggy Jordan Bayou. It includes St. George Sound shoreline (south of US 98) 1.6 km (1.0 mi) southwest along US 98 from the Carrabelle River Bridge and extends 1.9 km (1.2 mi) east along the St. George Sound shoreline. It includes from MLLW to where densely vegetated habitat or developed structures such as US 98, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL–12: Lanark Reef. 260 ha (643 ac) in Franklin County

The entire unit is State owned. This unit includes the entire island and emerging sandbars to MLLW.

Unit FL–13: Phipps Preserve. 42 ha (104 ac) in Franklin County

This unit includes all of Phipps Preserve (owned by The Nature Conservancy) and any emerging sandbars from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL–14: Hagens Cove. 486 ha (1200 ac) in Taylor County

The majority of the unit is within Big Bend Wildlife Management Area. This unit includes all of Hagens Cove and extends from MLLW on north side of Sponge Point to MLLW on south side of Piney Point. The eastern boundary of this unit ends (0.20 mi) west of SR 361. It includes from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL–15: Anclote Key and North Anclote Bar. 146 ha (360 ac) in Pasco and Pinellas Counties

The majority of the unit is within Anclote Key State Preserve. This unit includes all of North Anclote Bar to the MLLW and the north, south and western sides of Anclote Key from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL–16: Three Rooker Bar Island. 76 ha (188 ac) in Pinellas County

The majority of the unit is within Pinellas County Aquatic Preserve. This unit includes all the islands and emerging sandbars of this complex to MLLW.

Unit FL-17: North Honeymoon Island. 45 ha (112 ac) in Pinellas County

The majority of the unit is within Honeymoon Island State Recreation Area. This unit includes from Pelican Cove north to the far northern tip of Honeymoon Island. It includes the western shoreline from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur or the MLLW on the eastern shoreline.

Unit FL-18: South Honeymoon Island. 28 ha (70 ac) in Pinellas County

The majority of the unit is private land. This unit includes the southern end (southern-most 0.32 km (0.20 mi) on western side) of Honeymoon Island and encompasses the far southeastern tip and includes any emerging islands or sandbars to Hurricane Pass. It includes from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL-19: Caladesi Island. 120 ha (296 ac) in Pinellas County

The majority of the unit is within Caladesi Island State Park. This unit extends from Hurricane Pass to Dunedin Pass on the Gulf of Mexico side. It includes from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL-20: Shell Key and Mullet Key. 190 ha (470 ac) in Pinellas County

The majority of the unit is within Fort Desoto Park. This unit includes the Shell Key island complex. It also includes the northwest portion of Mullet Key including the western shorelines from Bunces Pass extending south, stopping 1.4 km (.86 mi) north of Ft. Desoto County Park pier. It includes from MLLW to where densely vegetated habitat or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL-21: Egmont Key. 153 ha (377 ac) Hillsborough County

The majority of the unit is within Egmont Key National Wildlife Refuge. This unit includes the entire island to MLLW.

Unit FL-22: Cayo Costa. 175 ha (432 ac) in Lee County

The majority of the unit, including its northern and southern boundaries, is within Cayo Costa State Park, and nearly all of the remaining area is in the Cayo Costa Florida Conservation and Recreation Lands (CARL) acquisition

project. This unit begins at the northern limit of sandy beaches at the northern end of the island, extends through Murdock Point, which at present has a sandbar and lagoon system, and ends at the former entrance to Murdock Bayou. It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL-23: North Captiva Island. 36 ha (88 ac) in Lee County

The unit is within the Cayo Costa CARL land purchase project. This unit includes the western shoreline extending from 0.80 km (0.50 mi) south of Captiva Pass to approximately Foster Bay. It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL-25: Bunche Beach. 187 ha (461 ac) in Lee County

This unit is mostly within a CARL Estero Bay acquisition project. Bunche Beach (also spelled Bunch) lies along San Carlos Bay, on the mainland between Sanibel Island and Estero Island (Fort Myers Beach), extending east from the Sanibel Causeway past the end of John Morris Road to a canal serving a residential subdivision. The unit also includes the western tip of Estero Island (Bodwitch Point, also spelled Bowditch Point), including Bowditch Regional Park, operated by Lee County and, on the southwest side of the island facing the Gulf, the beach south nearly to the northwesterly intersection of Estero Boulevard and Carlos Circle. It includes land from MLLW to where densely vegetated habitat or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur or, along the developed portion of Estero Island.

Unit FL-26: Estero Island. 86 ha (211 ac) in Lee County

The majority of the unit is privately owned. The unit consists of approximately the southern third of the island's Gulf-facing shoreline starting near Avenida Pescadora to near Redfish Road. The unit excludes south-facing shoreline at the south end of the island that faces Big Carlos Pass rather than the Gulf. It includes land from MLLW to where densely vegetated habitat (including grass or lawns) or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL-27: Marco Island. 245 ha (606 ac) in Collier County

Most of the unit is at the Tigertail Beach County Park. The unit's northern border is on the north side of Big Marco Pass, including Coconut Island and all emerging sand bars. On the south side of Big Marco Pass, the boundary starts at the north boundary of Tigertail Beach County Park and extends to just south of the fourth condominium tower south of the County Park. The placement of the southern boundary assures that the unit includes all of Sand Dollar Island, the changeable sandbar off Tigertail Beach. The western boundary includes all the sand bars in Big Marco Pass but excludes Hideaway Beach. It includes land from MLLW to where densely vegetated habitat (including grass or lawns) or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL-28: Marquesas Keys. 2937 ha (7256 ac) in Monroe County

The unit comprises the roughly circular atoll that encloses Mooney Harbor, including Gull Keys and Mooney Harbor Key. The entire unit is within Key West National Wildlife Refuge. It includes land from MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur.

Unit FL-29: Boca Grande/Woman/Ballast Keys. 56 ha (138 ac) in Monroe County

These Keys are east of the Marquesas Keys and west of Key West. Boca Grande and Woman Keys are within Key West National Wildlife Refuge. Ballast Key is privately owned. This unit consists only of sandy beaches and flats between the MLLW and to where densely vegetated habitat or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL-30: Bahia Honda/Ohio Keys. 372 ha (918 ac) in Monroe County

This unit comprises Bahia Honda Key (including a small island off its southwest shore), which is almost entirely owned by Bahia Honda State Park, plus Ohio Key, which is privately owned. It includes land from MLLW to where densely vegetated habitat (including grass or lawns) or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL-31: Lower Matecumbe Key. 19 ha (48 ac) in Monroe County

Part of the unit is at Anne's Beach park, an Islamorada village park. The remaining parts are at Sunset Drive (Lower Matecumbe Beach) and at Costa Bravo Drive (Port Antiqua Homeowners Beach) on the Florida Bay side of the island. It includes land from MLLW to where densely vegetated habitat (including grass or lawns) or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL-32: Sandy Key/Carl Ross Key. 67 ha (165 ac) in Monroe County

This unit consists of two adjoining islands in Florida Bay, roughly south of Flamingo in Everglades National Park. The entire area is owned and managed by the National Park Service. It includes land from MLLW to where densely vegetated habitat (including grass or lawns) or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL-33: St. Lucie Inlet. 114 ha (282 ac) in Martin County

The unit includes a small area south of the jetty on the north shore of St. Lucie Inlet, from the jetty west 0.42 km

(0.26 mi). While the two sides of the inlet are privately owned, the great majority of the unit is on public land in the Saint Lucie Inlet State Preserve, administered by Jonathan Dickinson State Park. It begins on the sandy shoreline south of Saint Lucie Inlet and extends along the Atlantic Ocean shoreline 2.6 km (1.6 mi). It includes land from MLLW to where densely vegetated habitat (including grass or lawns) or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur. The unit does not include sandbars within the inlet.

Unit FL-34: Ponce de Leon Inlet. 68 ha (168 ac) in Volusia County

The majority of the unit is within Smyrna Dunes Park and Lighthouse Point Park. This unit includes shoreline extending from the jetty north of Ponce de Leon Inlet west to the Halifax River and Inlet junction. It includes shoreline south of Ponce de Leon Inlet from the inlet and Halifax River junction, extending east and south along the Atlantic Ocean shoreline 1.2 km (.70 mi). It includes land from MLLW to where densely vegetated habitat (including grass or lawns) or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL-35: Nassau Sound-Huguenot. 950 ha (2347 ac) in Duval County

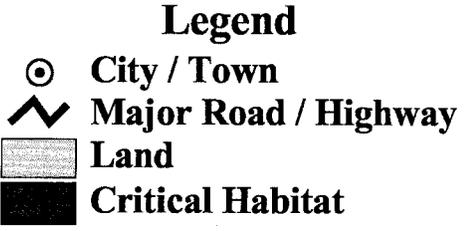
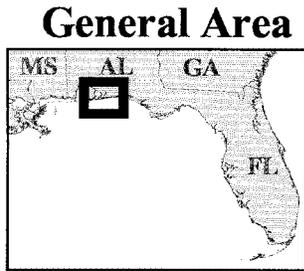
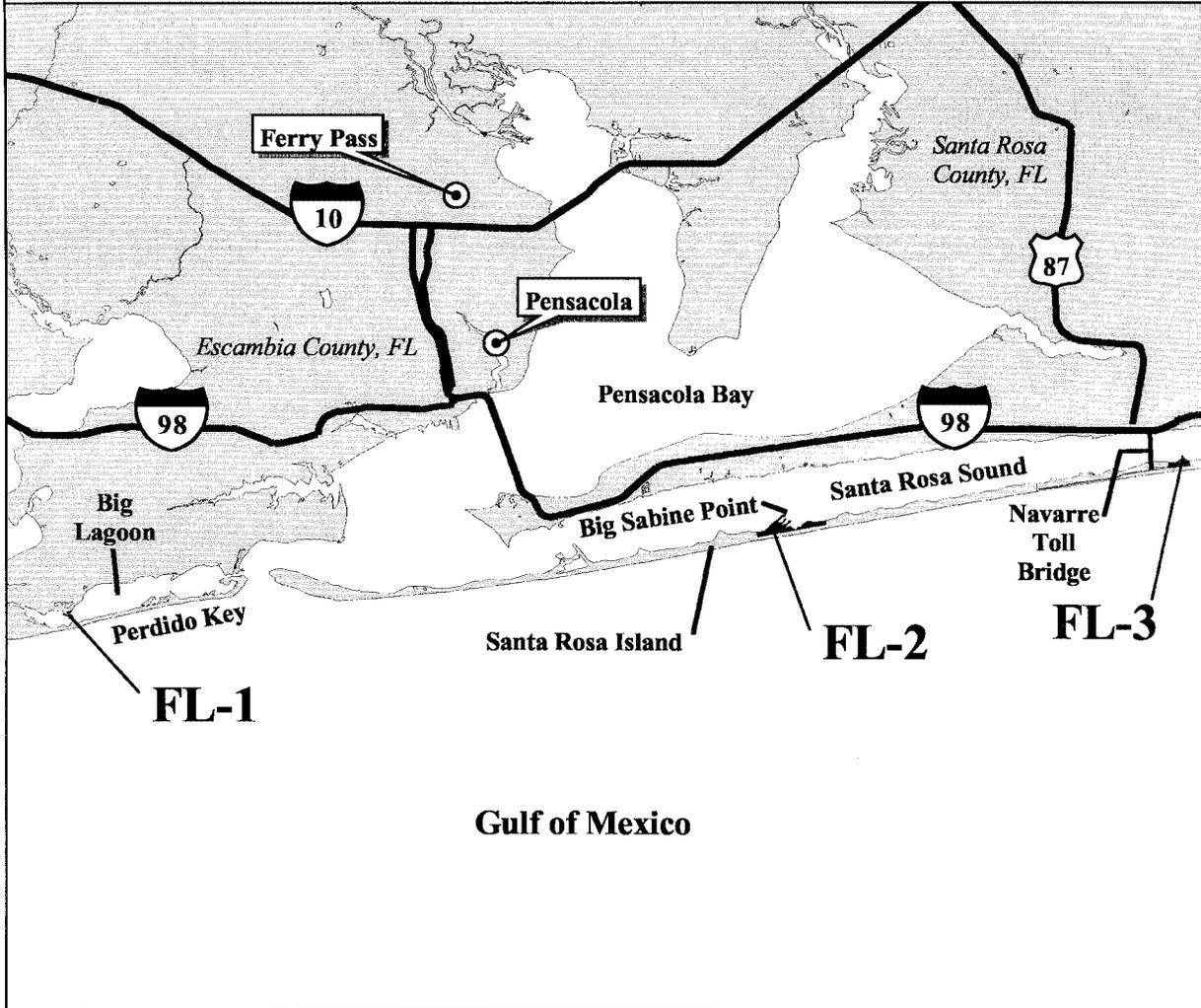
The majority of the unit is within Big Talbot Island State Park, Little Talbot Island State Park, and the Timucuan Ecological and Historical Preserve. This unit includes all emergent shoals and shoreline east of Nassau River bridge and extends to the inlet of the St. John's River. Amelia Island and the northern 2.7 km (1.7 mi) shoreline along Talbot Island are not included. It includes land from MLLW to where densely vegetated habitat (including grass or lawns) or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur.

Unit FL-36: Tiger Islands. 53 ha (130 ac) in Nassau County

This unit is privately owned. This unit extends from the mouth of Tiger Creek and runs north along Tiger Island 0.8 km (0.5 mi) and south along Little Tiger Island 1.4 km (0.9 mi). It includes land from MLLW to where densely vegetated habitat (including grass or lawns) or developed structures, not used by the piping plover, begin and where the constituent elements no longer occur. Emerging sandbars to MLLW are also included.

**BILLING CODE 4310-55-P**

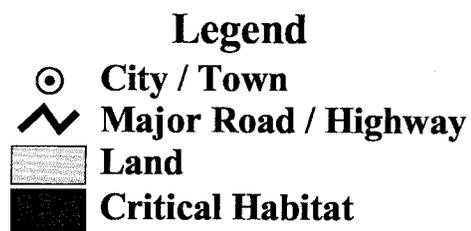
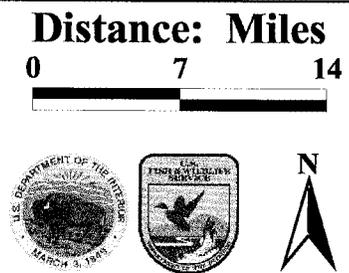
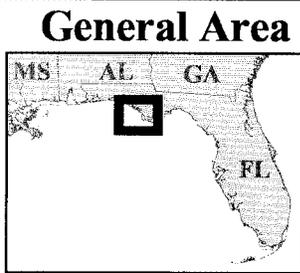
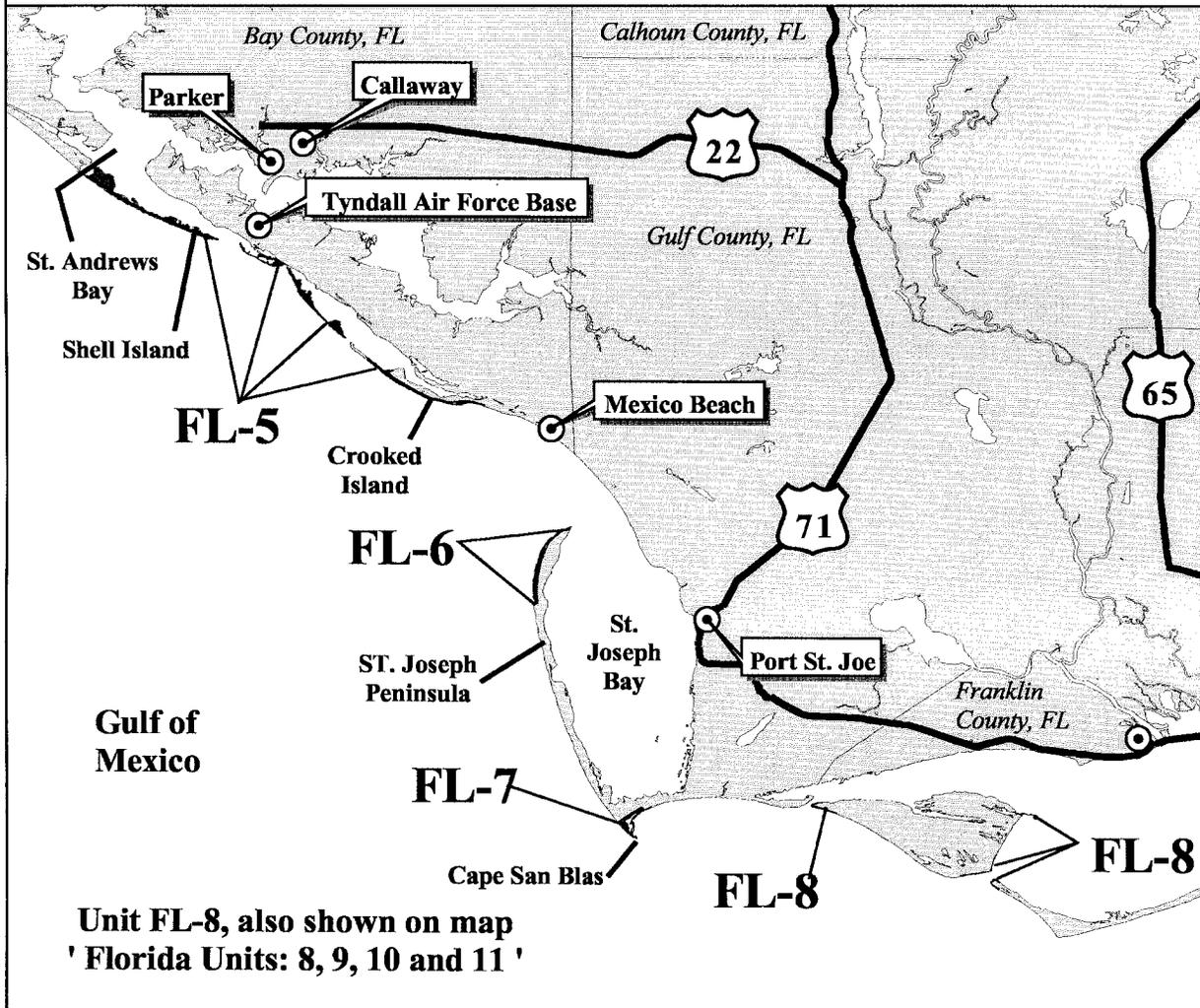
# General locations of the designated critical habitat for the Wintering Piping Plover.



**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Florida Units: 1, 2 and 3

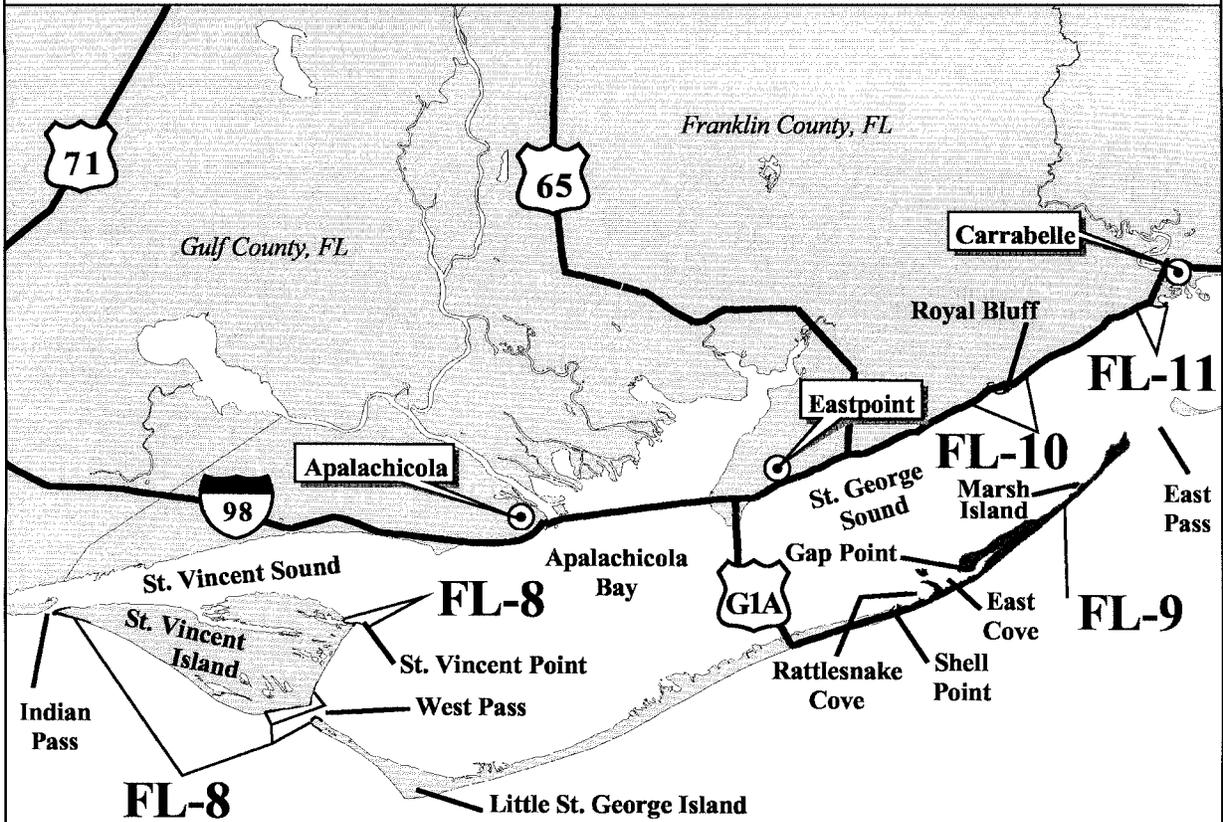
# General locations of the designated critical habitat for the Wintering Piping Plover.



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## Florida Units: 5, 6 and 7

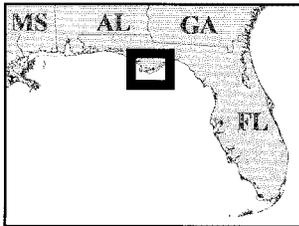
# General locations of the designated critical habitat for the Wintering Piping Plover.



Unit FL-8, also shown on map  
' Florida Units: 5, 6 and 7 '

Gulf of Mexico

### General Area



### Distance: Miles



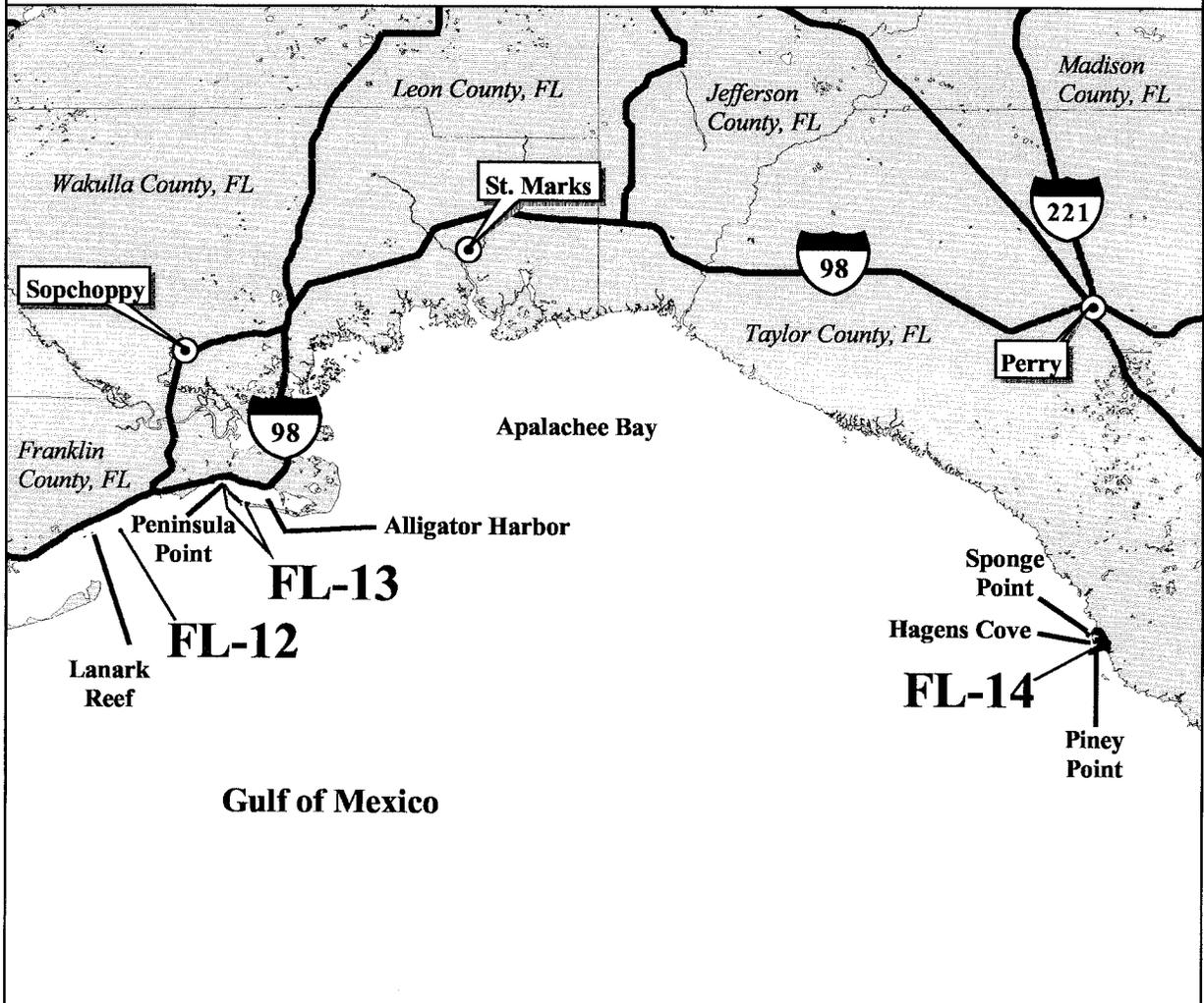
### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

# Florida Units: 8, 9, 10 and 11

# General locations of the designated critical habitat for the Wintering Piping Plover.



**General Area**

**Distance: Miles**

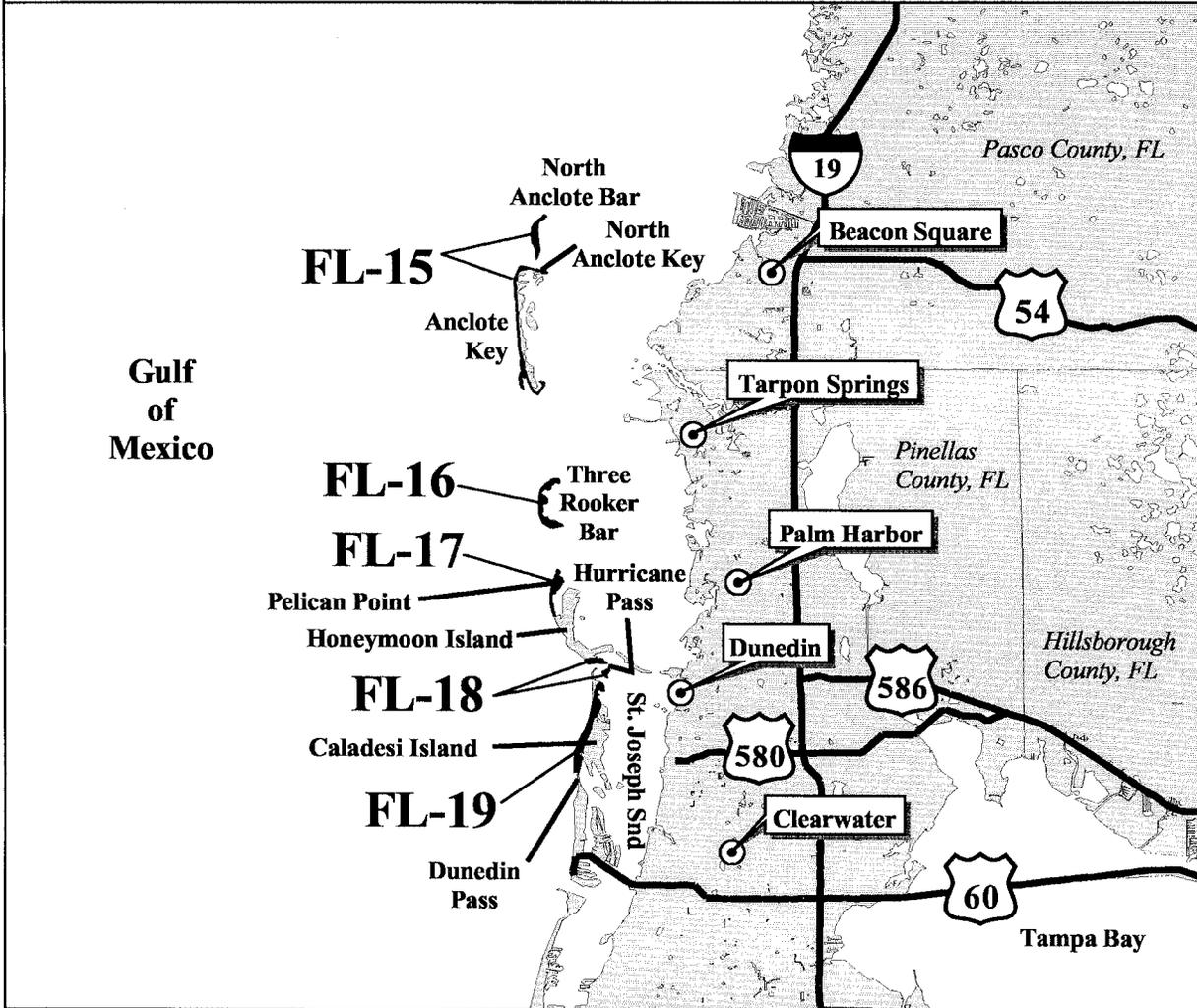
**Legend**

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

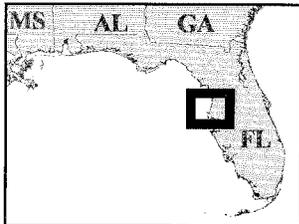
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## Florida Units: 12, 13 and 14

# General locations of the designated critical habitat for the Wintering Piping Plover.



**General Area**



**Distance: Miles**



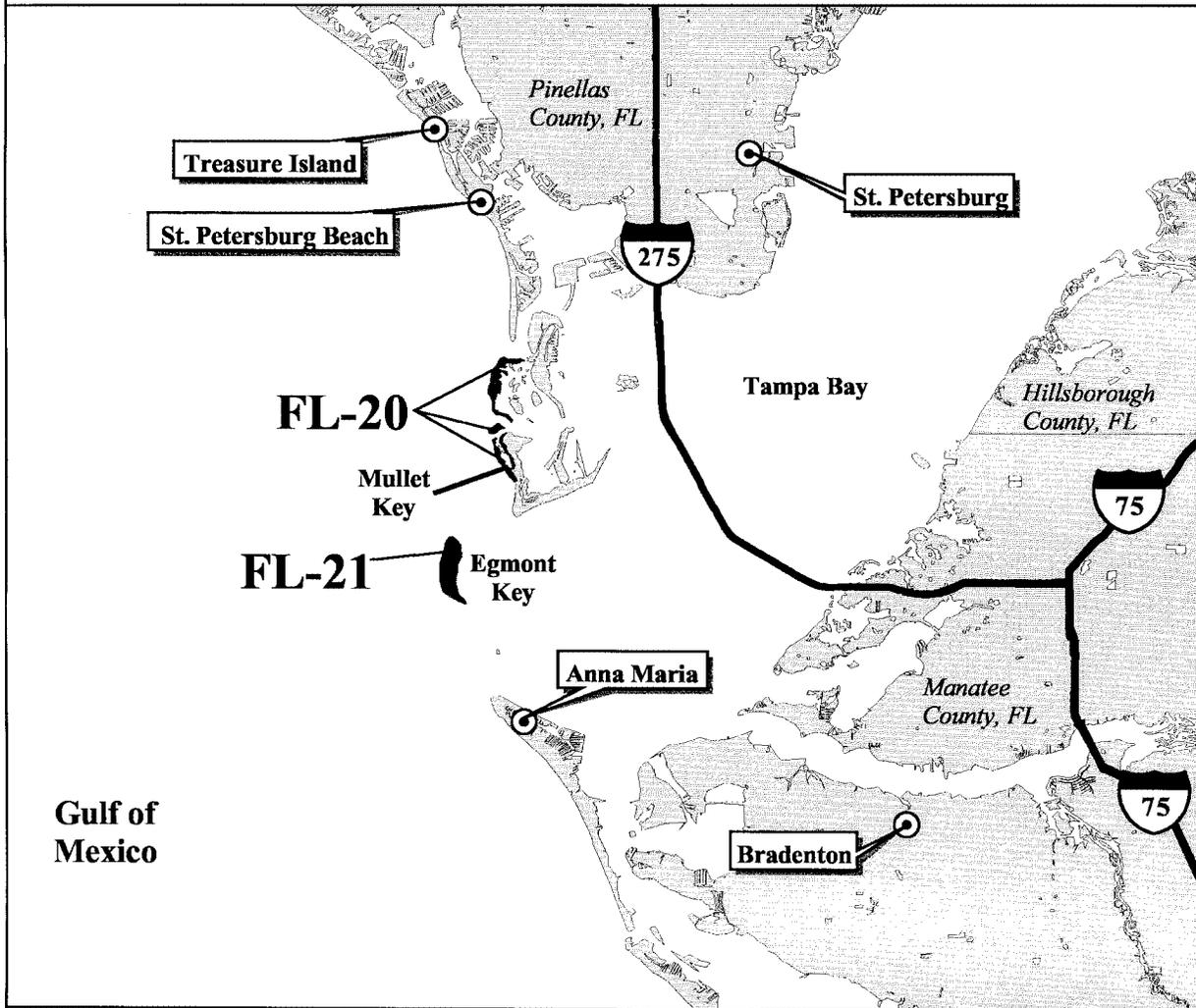
**Legend**

- ⊙ City / Town
- ↘ Major Road / Highway
- ▭ Land
- ▬ Critical Habitat

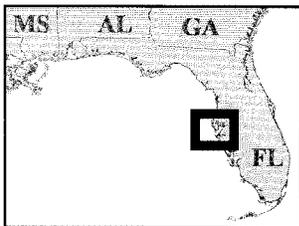
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**Florida Units: 15, 16, 17, 18 and 19**

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



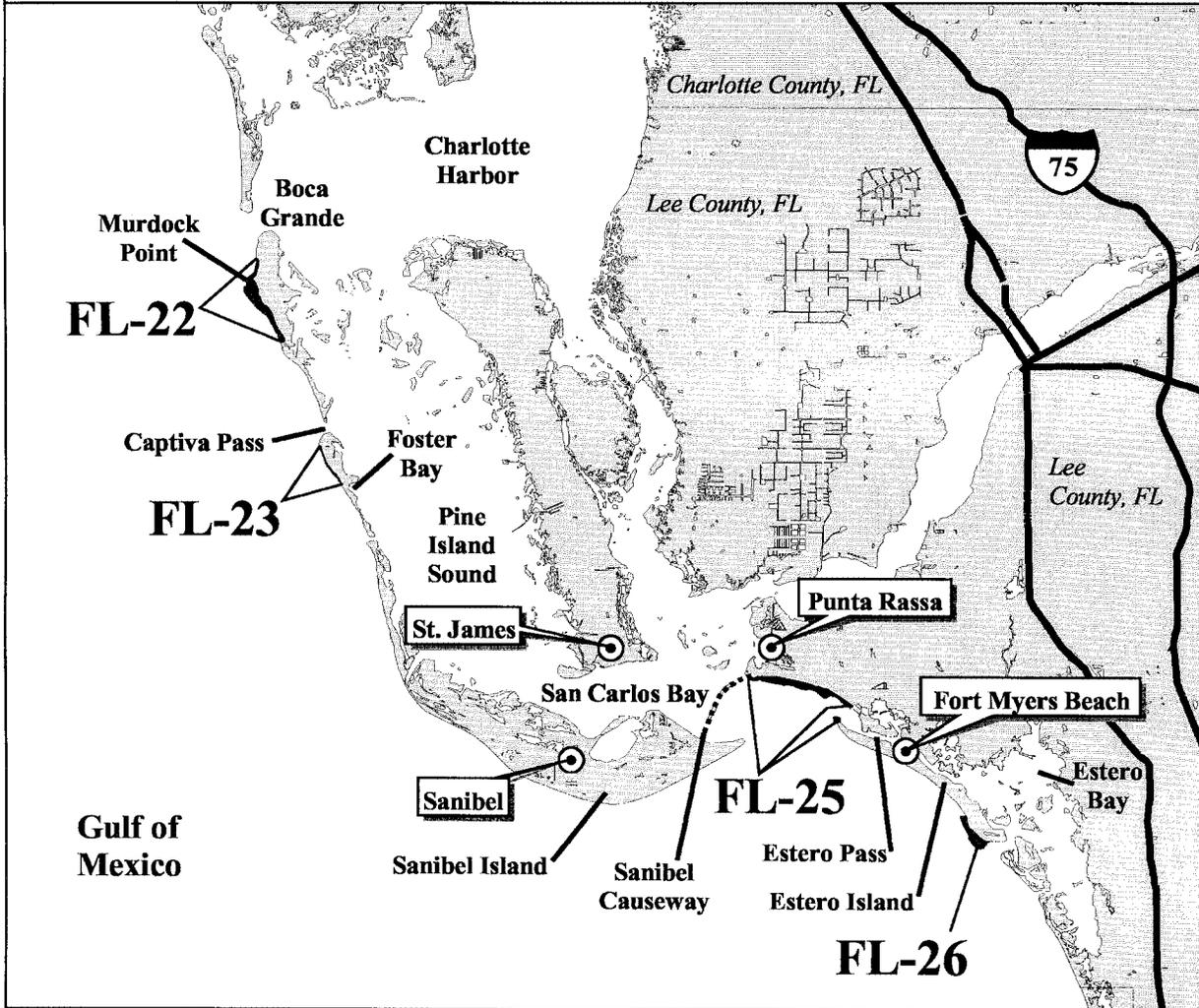
### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

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# Florida Units: 20 and 21

# General locations of the designated critical habitat for the Wintering Piping Plover.



**General Area**

**Distance: Miles**

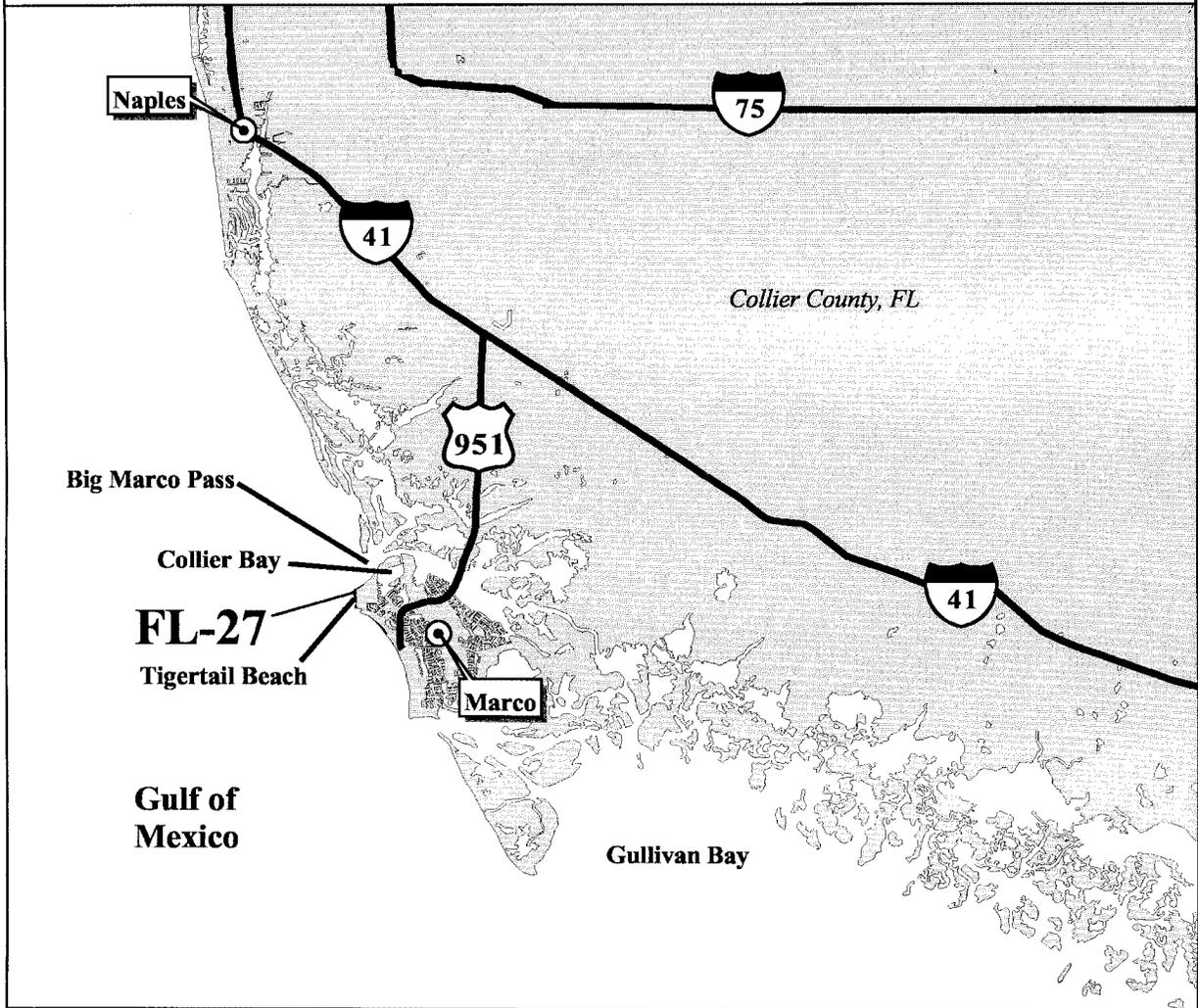
**Legend**

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

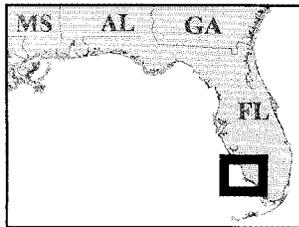
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Florida Units: 22, 23, 25 and 26

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



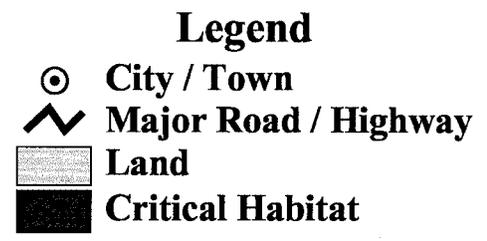
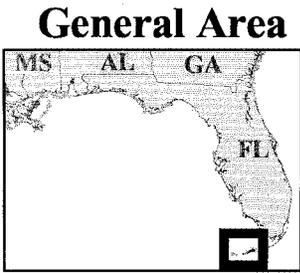
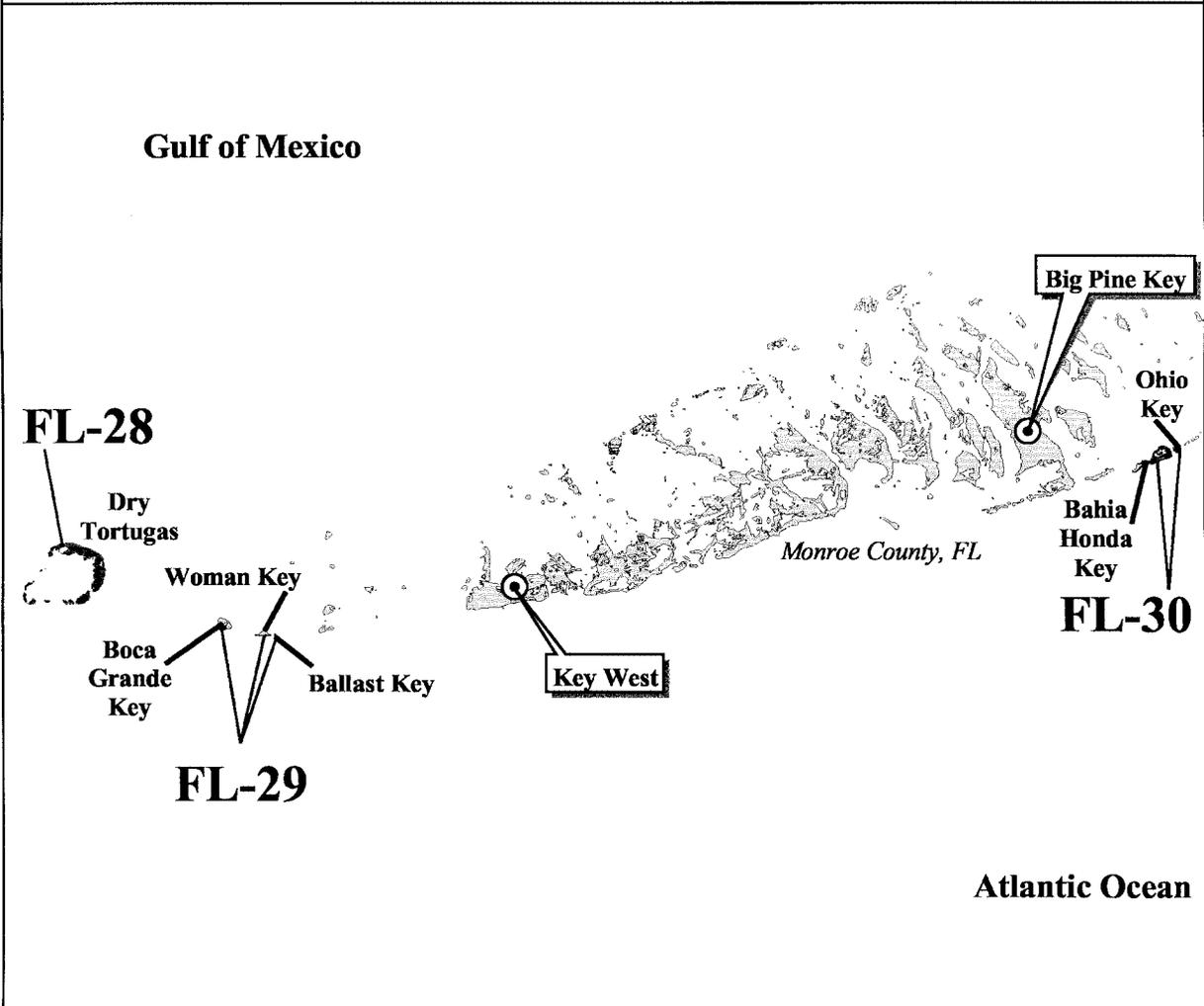
### Legend

-  City / Town
-  Major Road / Highway
-  Land
-  Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

# Florida Unit: 27

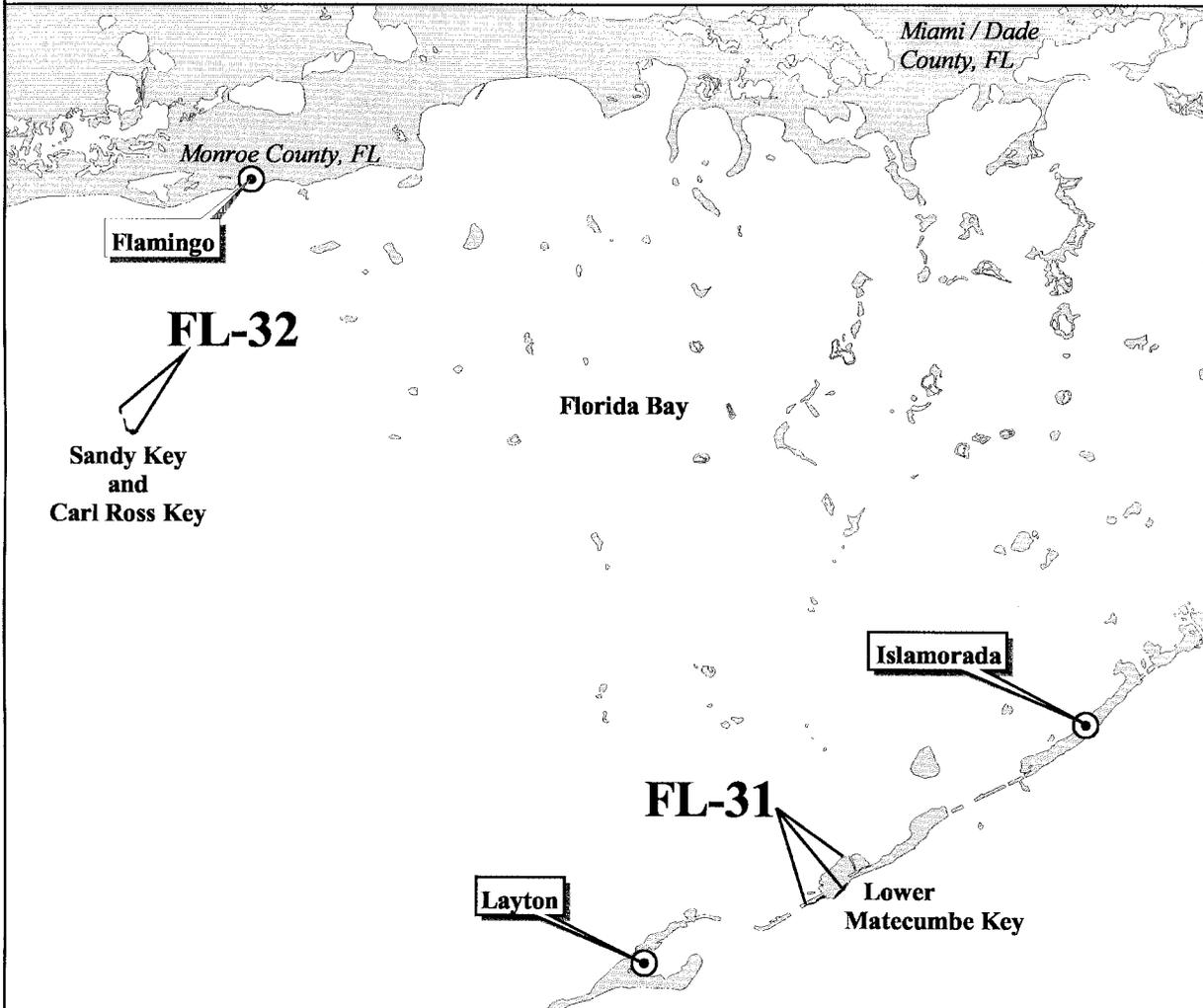
# General locations of the designated critical habitat for the Wintering Piping Plover.



**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Florida Units: 28, 29 and 30

# General locations of the designated critical habitat for the Wintering Piping Plover.

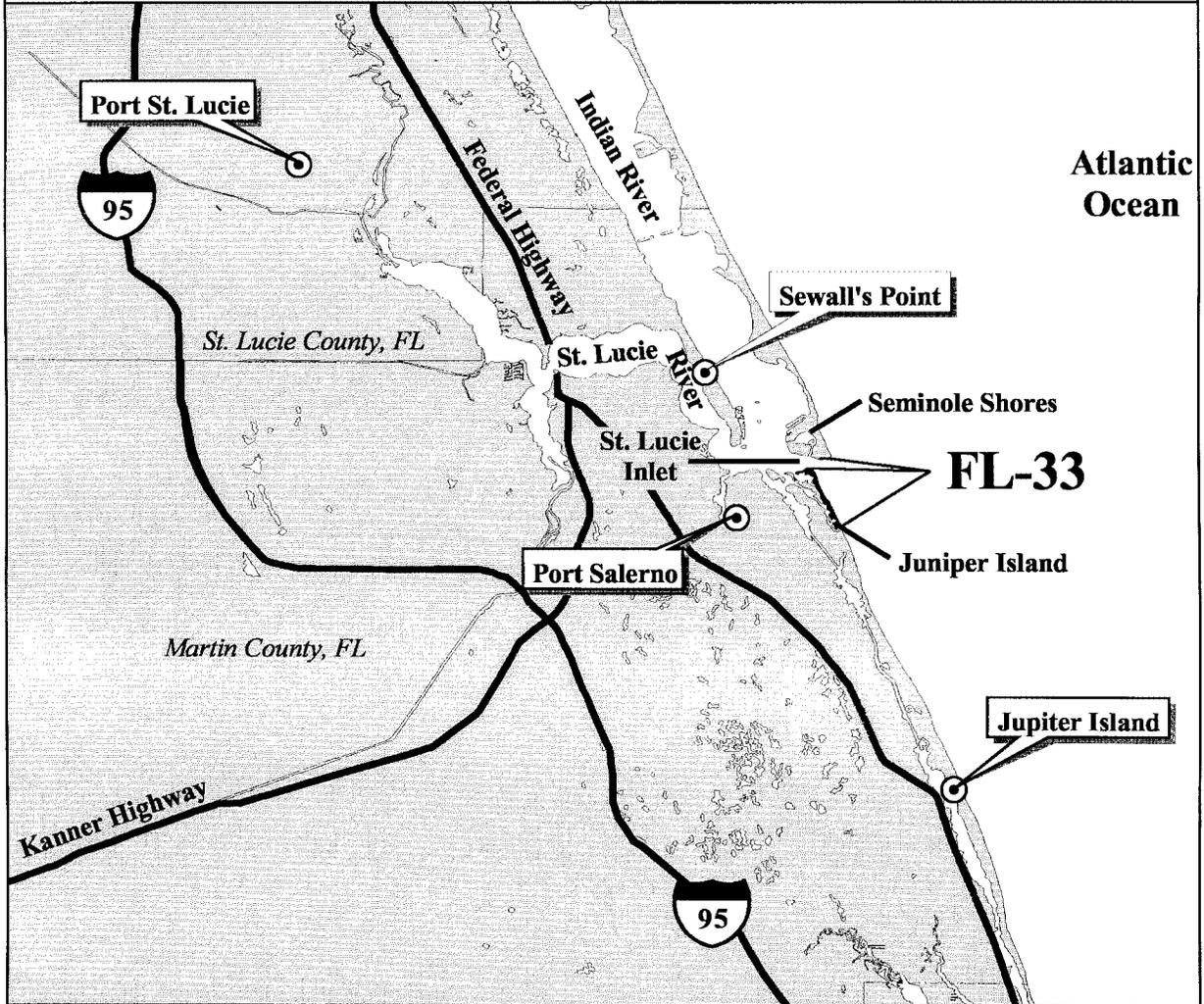


<p><b>General Area</b></p>	<p><b>Distance: Miles</b></p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li> City / Town</li> <li> Major Road / Highway</li> <li> Land</li> <li> Critical Habitat</li> </ul>
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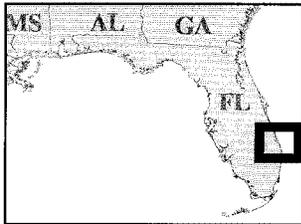
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Florida Units: 31 and 32

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



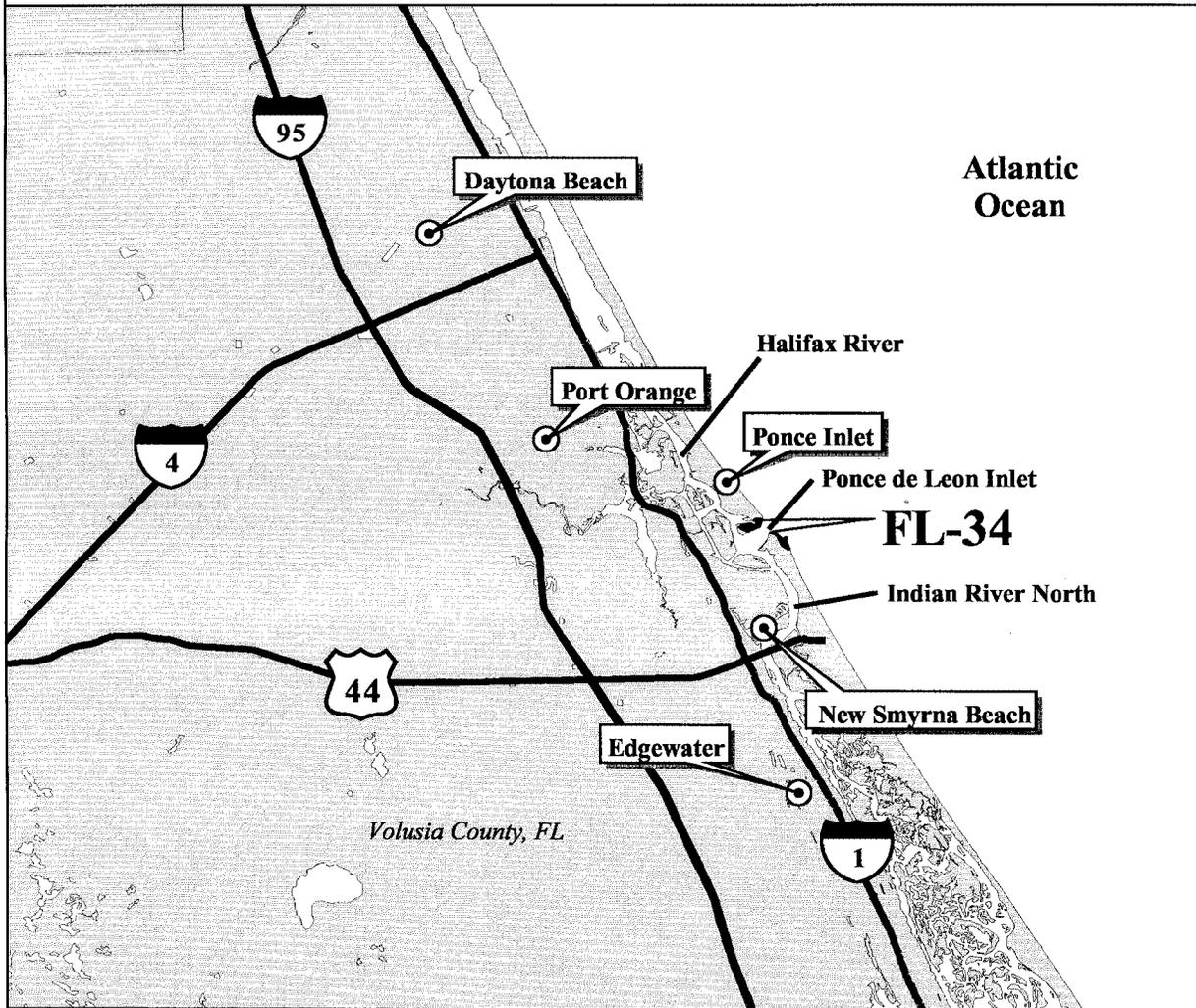
### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

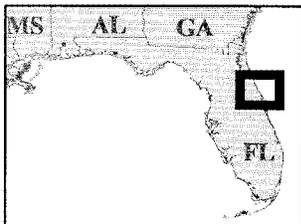
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Florida Unit: 33

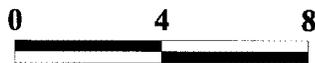
# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



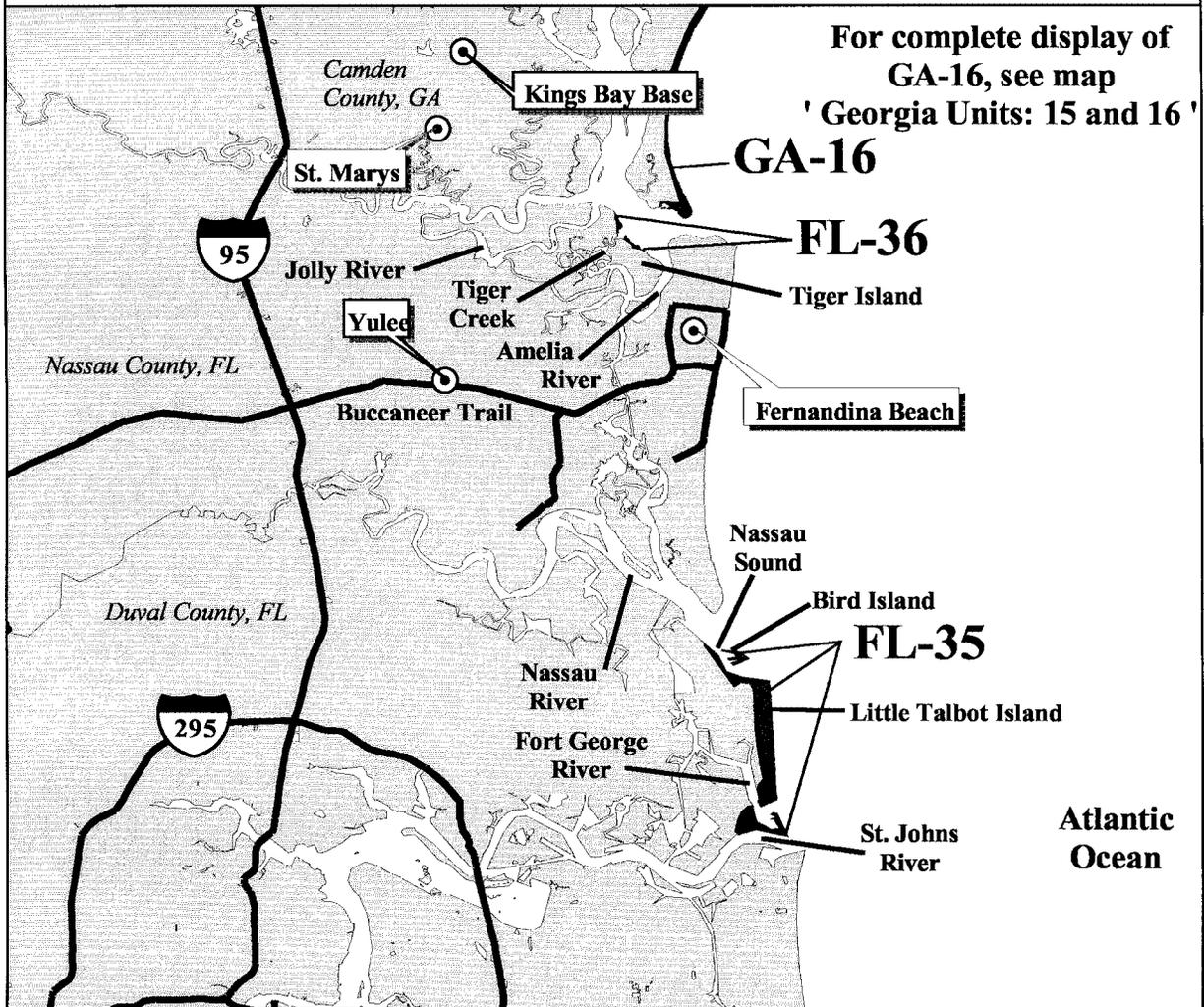
### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

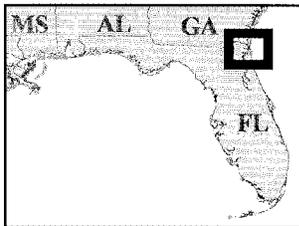
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Florida Unit: 34

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat



**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

# Florida Units: 35 and 36

*Alabama* (Maps were digitized using 1992 DOQQs)

Unit AL-1: Isle Aux Herbes. 227 ha (561 ac) in Mobile County

This unit includes the entire Isle Aux Herbes island where primary constituent elements occur to MLLW and is State-owned.

Unit AL-2: Dauphin, Little Dauphin, and Pelican Islands. 880 ha (2,174 ac) in Mobile County

This unit includes all of Dauphin Island where primary constituent

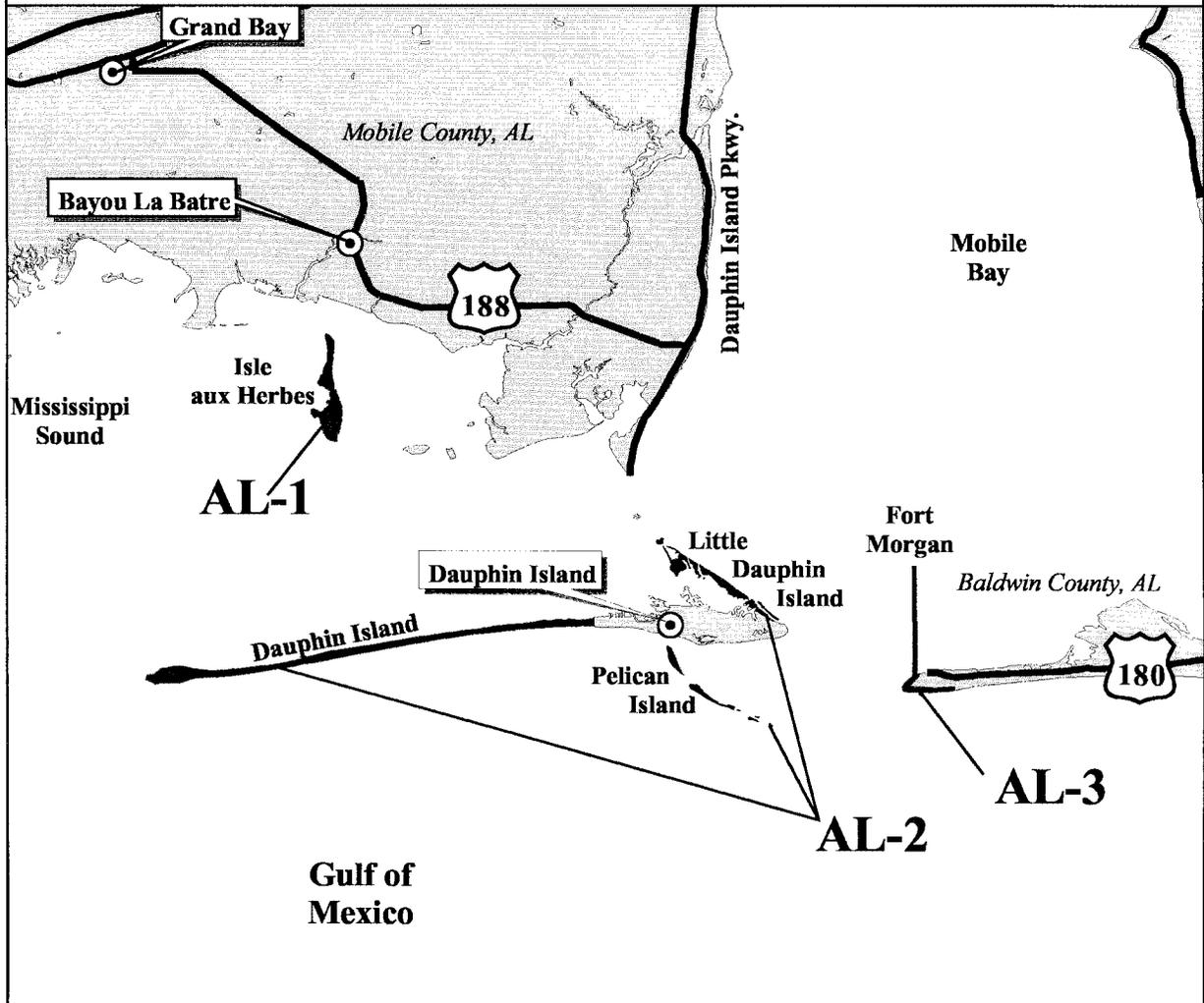
elements occur from St. Stephens Street approximately 17.6 km (10.9 mi) west to the western tip of the island to MLLW and all of Little Dauphin and Pelican Islands to MLLW. The area is mostly privately owned but includes State and Federal lands.

Unit AL-3: Fort Morgan. 67 ha (166 ac) in Baldwin County

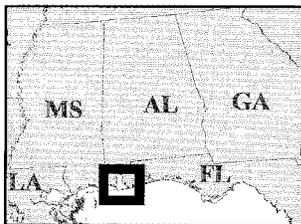
This area includes Mobile Bay and Gulf of Mexico shorelines within Bon Secour National Wildlife Refuge, Fort Morgan Unit. This unit extends from the

west side of the pier on the northwest point of the peninsula, following the shoreline approximately 2.8 km (1.74 mi) southwest around the tip of the peninsula, then east to the terminus of the beach access road and is bounded on the seaward side by MLLW and on the landward side to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. The area is State-owned but is leased by the Federal Government.

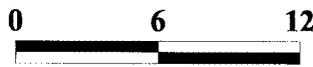
# General locations of the designated critical habitat for the Wintering Piping Plover.



**General Area**



**Distance: Miles**



**Legend**

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Alabama Units: 1, 2 and 3

*Mississippi* (Maps were digitized using 1992 and 1997 DOQQs)

Unit MS-1: Lakeshore through Bay St. Louis. 41 ha (101 ac) in Hancock County

This unit extends from the north side of Bryan Bayou outlet and includes the shore of the Mississippi Sound following the shoreline northeast approximately 15.0 km (9.3 mi) and ending at the southeast side of the Bay Waveland Yacht Club. The landward boundary of this unit follows the Gulf side of South and North Beach Boulevard and the seaward boundary is MLLW. The shoreline of this unit is privately owned.

Unit MS-2: Henderson Point. 34 ha (84 ac) in Harrison County

This unit extends from 0.2 km (0.12 mi) west of the intersection of 3rd Avenue and Front Street and includes the shore of the Mississippi Sound following the shoreline northeast approximately 4.4 km (2.7 mi) to the west side of Pass Christian Harbor. The landward boundary of this unit follows the Gulf side of U.S. Highway 90 and the seaward boundary is MLLW. The shoreline of this unit is privately owned.

Unit MS-3: Pass Christian. 77 ha (190 ac) in Harrison County

This unit extends from the east side of Pass Christian Harbor and includes the shore of the Mississippi Sound following the shoreline northeast approximately 10.5 km (6.5 mi) to the west side of Long Beach Pier and Harbor. The landward boundary of this unit follows the Gulf side of U.S. Highway 90 and the seaward boundary is MLLW. The shoreline of this unit is privately owned.

Unit MS-4: Long Beach. 38 ha (94 ac) in Harrison County

This unit extends from the east side of Long Beach Pier and Harbor and includes the shore of the Mississippi Sound following the shoreline northeast approximately 4.4 km (2.7 mi) to the west side of Gulfport Harbor. The landward boundary of this unit follows

the Gulf side of U.S. Highway 90 and the seaward boundary is MLLW. The shoreline of this unit is privately owned.

Unit MS-5: Gulfport. 39 ha (96 ac) in Harrison County

This unit extends from the east side of Gulfport Harbor and includes the shore of the Mississippi Sound following the shoreline northeast approximately 4.8 km (3.0 mi) to the west side of the groin at the southern terminus of Courthouse Road, Mississippi City, MS. The landward boundary of this unit follows the Gulf side of U.S. Highway 90 and the seaward boundary is MLLW. The shoreline of this unit is privately owned.

Unit MS-6: Mississippi City. 62 ha (153 ac) in Harrison County

This unit extends from the east side of the groin at the southern terminus of Courthouse Road, Mississippi City, MS, and includes the shore of the Mississippi Sound following the shoreline northeast approximately 7.9 km (4.9 mi) to the west side of President Casino. The landward boundary of this unit follows the Gulf side of U.S. Highway 90 and the seaward boundary is MLLW. The shoreline of this unit is privately owned.

Unit MS-10: Ocean Springs West. 11 ha (27 ac) in Jackson County

This unit extends from U.S. 90 and includes the shore of Biloxi Bay following the shoreline southeast approximately 1.9 km (1.2 mi) to the Ocean Springs Harbor inlet. The landward boundary of this unit follows the Bay side of Front Beach Drive and the seaward boundary is MLLW. The shoreline of this unit is privately owned.

Unit MS-11: Ocean Springs East. 7 ha (17 ac) in Jackson County

This unit extends from the east side of Weeks Bayou and includes the shore of Biloxi Bay following the shoreline southeast approximately 1.8 km (1.1 mi) to Halstead Bayou. The landward

boundary of this unit follows the Bay side of East Beach Drive and the seaward boundary is MLLW. The shoreline of this unit is privately owned.

Unit MS-12: Deer Island. 194 ha (479 ac) in Harrison County

This unit includes all of Deer Island, where primary constituent elements occur to the MLWW. Deer Island is privately owned.

Unit MS-13: Round Island. 27 ha (67 ac) in Jackson County

This unit includes all of Round Island to the MLWW and is privately owned

Unit MS-14: Mississippi Barrier Islands. 3,168 ha (7,828 ac) in Harrison and Jackson Counties.

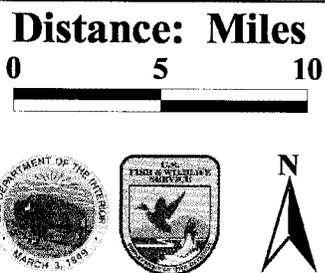
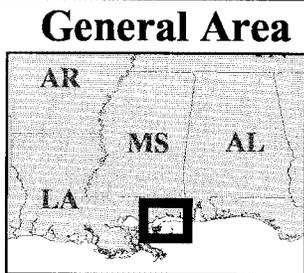
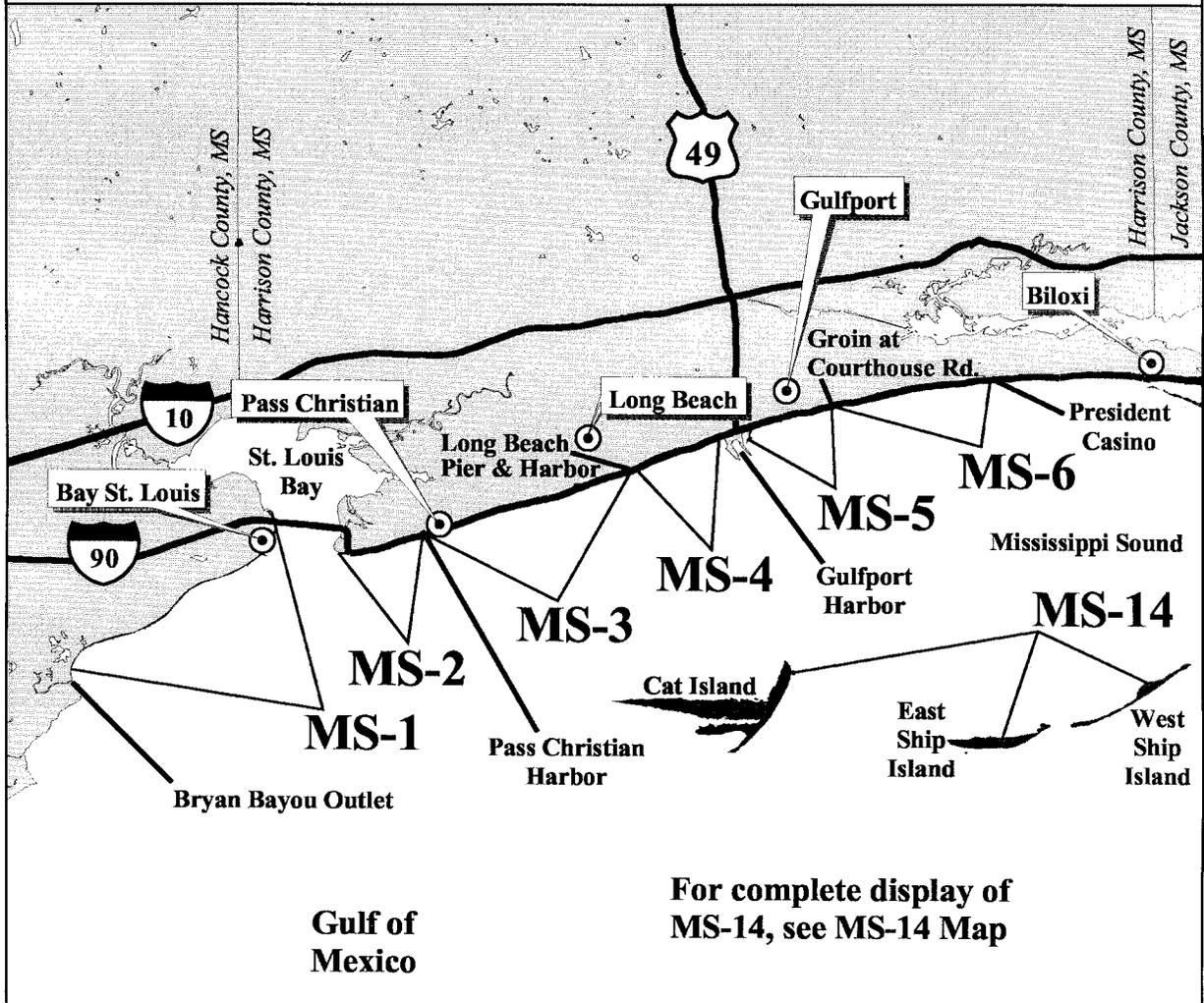
This unit includes all of Cat, East and West Ship, Horn, Spoil, and Petit Bois Islands where primary constituent elements occur to MLLW. Cat Island is privately owned, and the remaining islands are part of the Gulf Islands National Seashore.

Unit MS-15: North and South Rigolets. 159 ha (393 ac) in Jackson County, MS, and 12 ha (30 ac) in Mobile County, AL

This unit extends from the southwestern tip of South Rigolets Island and includes the shore of Point Aux Chenes Bay, the Mississippi Sound, and Grand Bay following the shoreline east around the western tip, then north to the south side of South Rigolets Bayou; then from the north side of South Rigolets Bayou (the southeastern corner of North Rigolets Island) north to the northeastern most point of North Rigolets Island. This shoreline is bounded on the seaward side by MLLW and on the landward side to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. Approximately 4.4 km (2.7 mi) are in Mississippi and 2.9 km (1.8 mi) are in Alabama. Almost half the Mississippi shoreline length is in the Grand Bay National Wildlife Refuge.

BILLING CODE 4310-55-P

# General locations of the designated critical habitat for the Wintering Piping Plover.

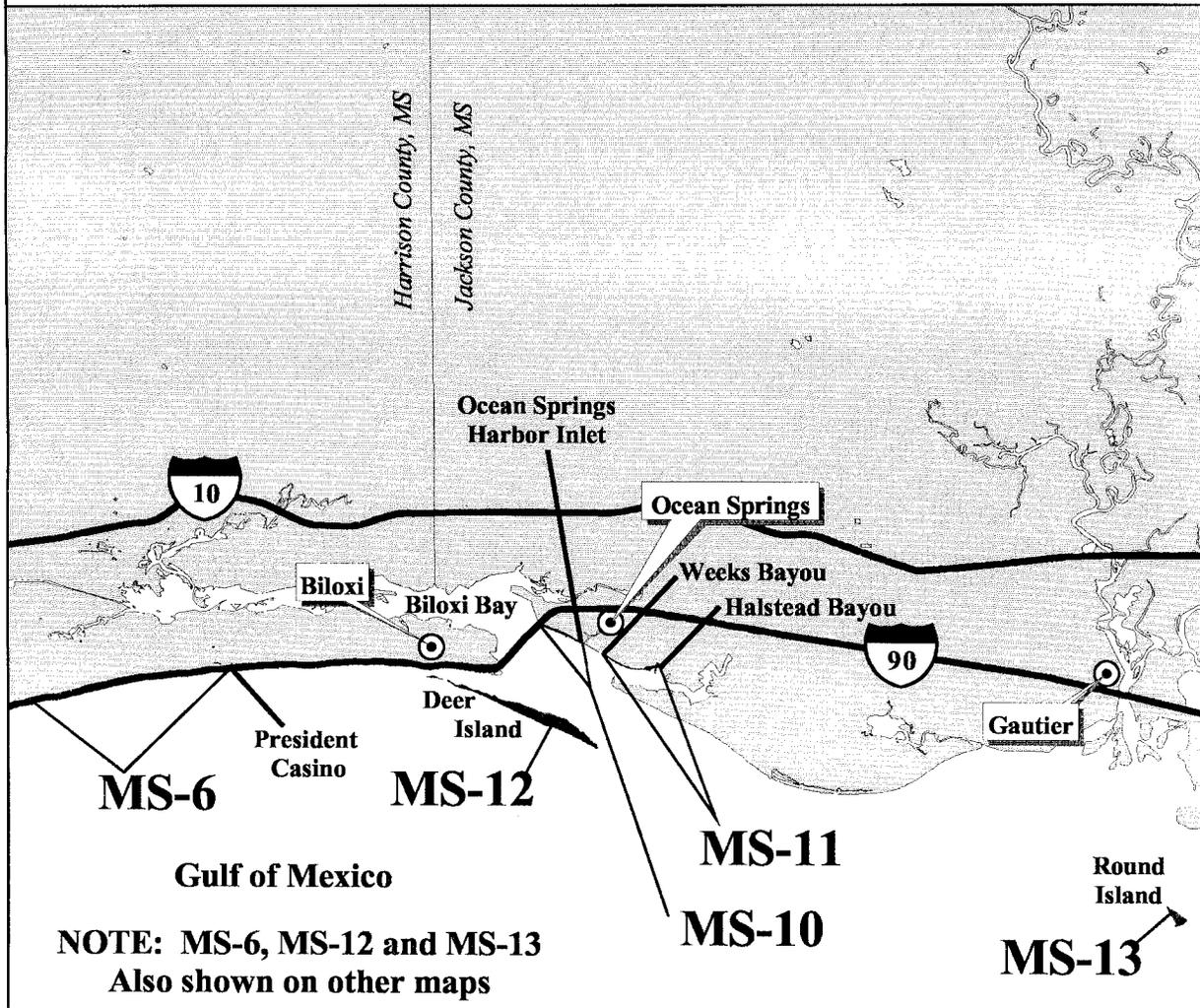


- Legend**
- City / Town
  - Major Road / Highway
  - Land
  - Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Mississippi Units: 1, 2, 3, 4, 5 and 6

# General locations of the designated critical habitat for the Wintering Piping Plover.

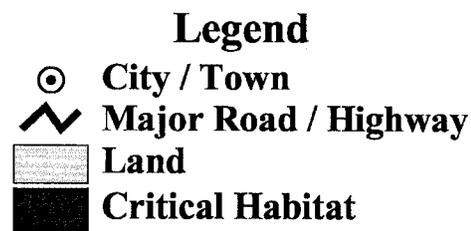
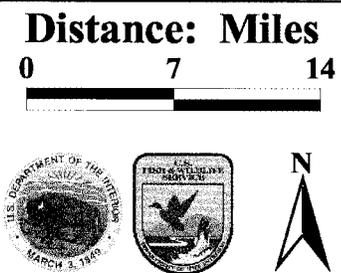
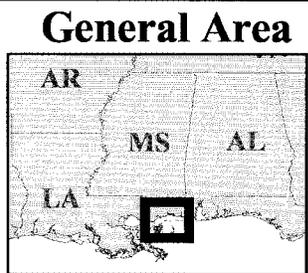
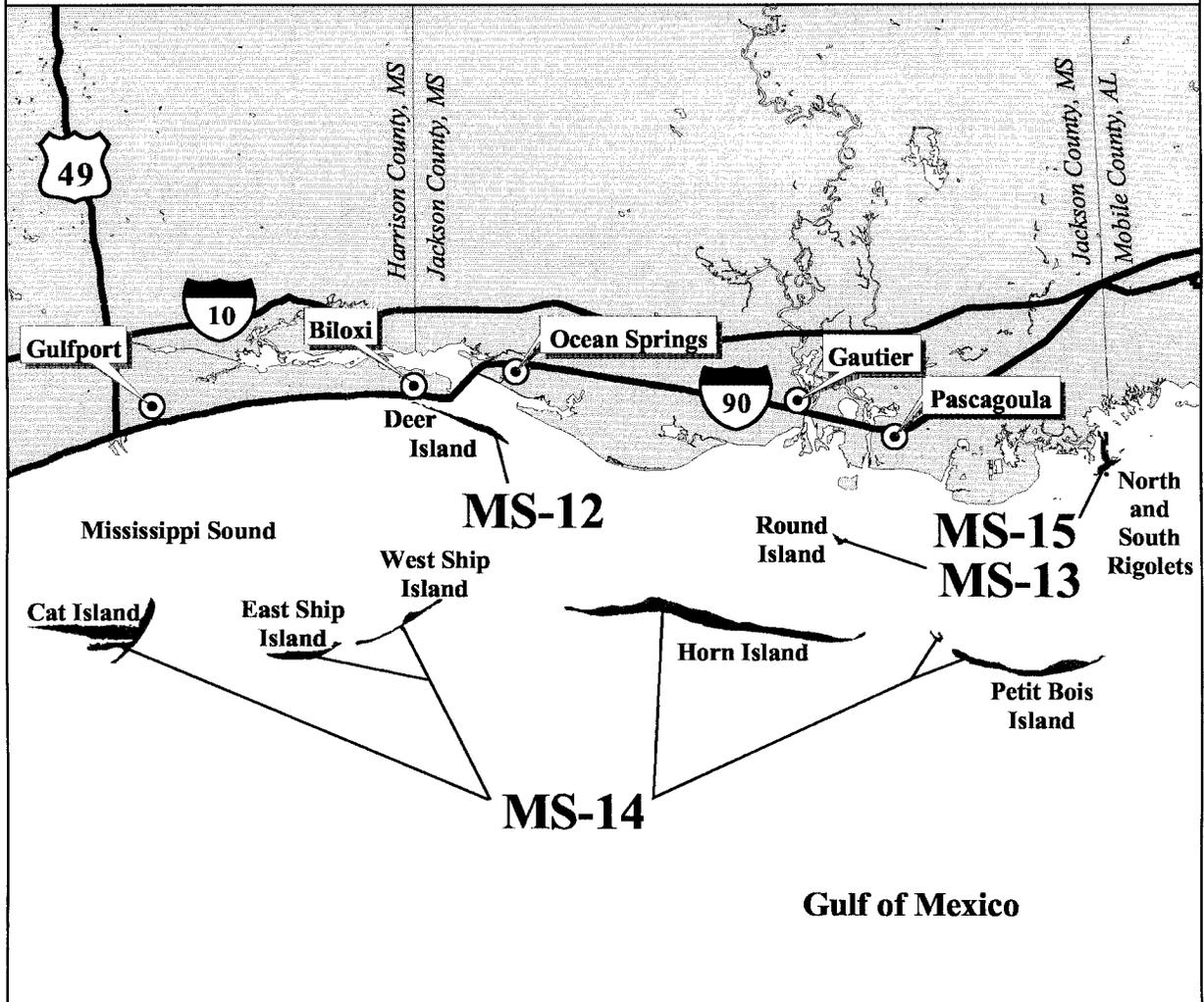


<p><b>General Area</b></p>	<p><b>Distance: Miles</b></p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li> City / Town</li> <li> Major Road / Highway</li> <li> Land</li> <li> Critical Habitat</li> </ul>
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**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Mississippi Units: 10 and 11

# General locations of the designated critical habitat for the Wintering Piping Plover.



**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Mississippi Units: 12, 13, 14 and 15

*Louisiana* (Maps were digitized using 1998 DOQQs)

Unit LA-1: Texas/Louisiana border to Cheniere au Tigre. 2,650 ha (6,548 ac) in Cameron and Vermilion Parishes

This unit extends from the east side of Sabine Pass (Texas/Louisiana border) and includes the shore of the Gulf of Mexico from the MLLW following the shoreline east 25.7 km (16.0 mi) to the west end of Constance Beach [approximately 2 km (1.2 mi) east of the intersection of Parish Road 528 and the beach]; it extends from the east end of the town of Holly Beach [0.25 km (0.16 mi) east of the intersection of Baritarick Boulevard and the beach] following the shoreline approximately 97 km (60.3 mi) east to the eastern boundary line of Rockefeller Wildlife Refuge [3.4 km (2.1 mi) east of Rollover Bayou]; and it extends from the east side of Freshwater Bayou Canal following the shoreline east for approximately 15 km (9.3 mi) to 1.3 km (0.81 mi) east of where the boundary of Paul J. Rainey Wildlife Sanctuary (National Audubon Society) meets the shoreline. All three sections of this unit include the land from the seaward boundary of MLLW to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. The shoreline in this unit is both state and privately owned.

Unit LA-2: Atchafalaya River Delta. 921 ha (2,276 ac) in St. Mary Parish, LA

This unit is located in the eastern portion of the State-owned Atchafalaya Delta Wildlife Management Area (WMA) and includes all exposed land and islands where primary constituent elements occur east and southeast of the main navigation channel of the Atchafalaya River to the MLLW. The islands located south and southeast of

the deltaic splay, Donna, T-Pat, and Skimmer Islands and the un-named bird island, are also included in this unit. This unit includes the entire islands where primary constituent elements occur to the MLLW.

Unit LA-3: Point Au Fer Island. 195 ha (482 ac) in Terrebonne Parish.

This unit includes the entire small island at the northwest tip of Point Au Fer Island to MLLW, then extends from the northwest tip of Point Au Fer Island following the shoreline southeast approximately 7.7 km (4.8 mi) to the point where the un-named oil and gas canal extending southeast from Locust Bayou meets the shoreline [0.8 km (0.5 mi) southeast from Locust Bayou]. This shoreline is bounded on the seaward side by MLLW and on the landward side to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. This entire unit is privately owned.

Unit LA-4: Isles Dernieres. 795 ha (1,964 ac) in Terrebonne Parish

This unit includes the State-owned Isles Dernieres chain, including Raccoon, Whiskey, Trinity and East Islands. This unit includes the entire islands where primary constituent elements occur to the MLLW.

Unit LA-5: Timbalier Island to East Grand Terre Island. 2,321 ha (5,735 ac) in Terrebonne, Lafourche, Jefferson, and Plaquemines Parishes

This unit includes: all of Timbalier Island where primary constituent elements occur to the MLLW, all of Belle Pass West [the "peninsula" extending north/northwest approximately 4.8 km (3.0 mi) from the west side of Belle Pass] where primary constituent elements occur to MLLW;

the Gulf shoreline extending approximately 11 km (6.8 mi) east from the east side of Belle Pass bounded on the seaward side by MLLW and on the landward side to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur; all of Elmers Island peninsula where primary constituent elements occur to MLLW and the Gulf shoreline from Elmers Island to approximately 0.9 km (0.56 mi) west of Bayou Thunder Von Tranc bounded on the seaward side by MLLW and on the landward side to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur; the Gulf shoreline of Grand Isle from the Gulf side of the hurricane protection levee to MLLW; and all of East Grand Terre Island where primary constituent elements occur to the MLLW.

Unit LA-6: Mississippi River Delta. 105 ha (259 ac) in Plaquemines Parish, LA

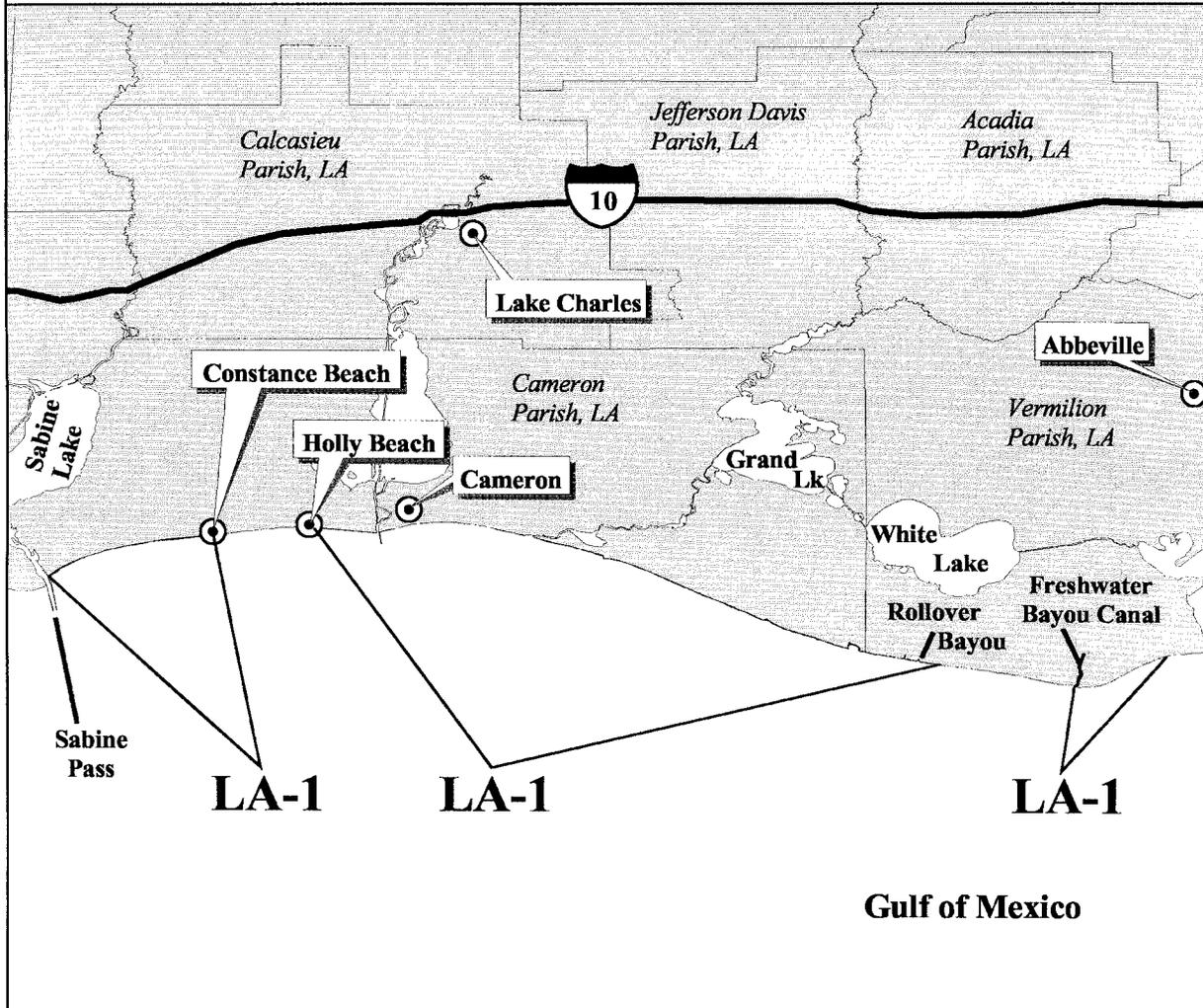
This unit is part of the State-owned Pass a Loutre Wildlife Management Area and includes un-named sand (spoil) islands off South Pass of the Mississippi River near Port Eads. The entire islands to MLLW are included in this unit.

Unit LA-7: Breton Islands and Chandeleur Island Chain. 3,116 ha (7,700 ac) in Plaquemines and St. Bernard Parishes, LA

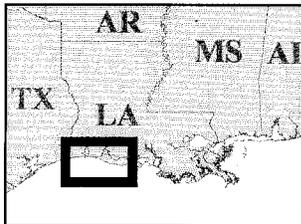
This unit includes Breton, Grand Gosier, and Curlew Islands and the Chandeleur Island chain. Those islands are part of the Breton National Wildlife Refuge or are state owned. The entire islands where primary constituent elements occur to MLLW are included in this unit.

**BILLING CODE 4310-55-P**

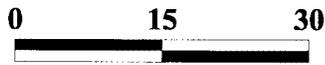
# General locations of the designated critical habitat for the Wintering Piping Plover.



**General Area**



**Distance: Miles**



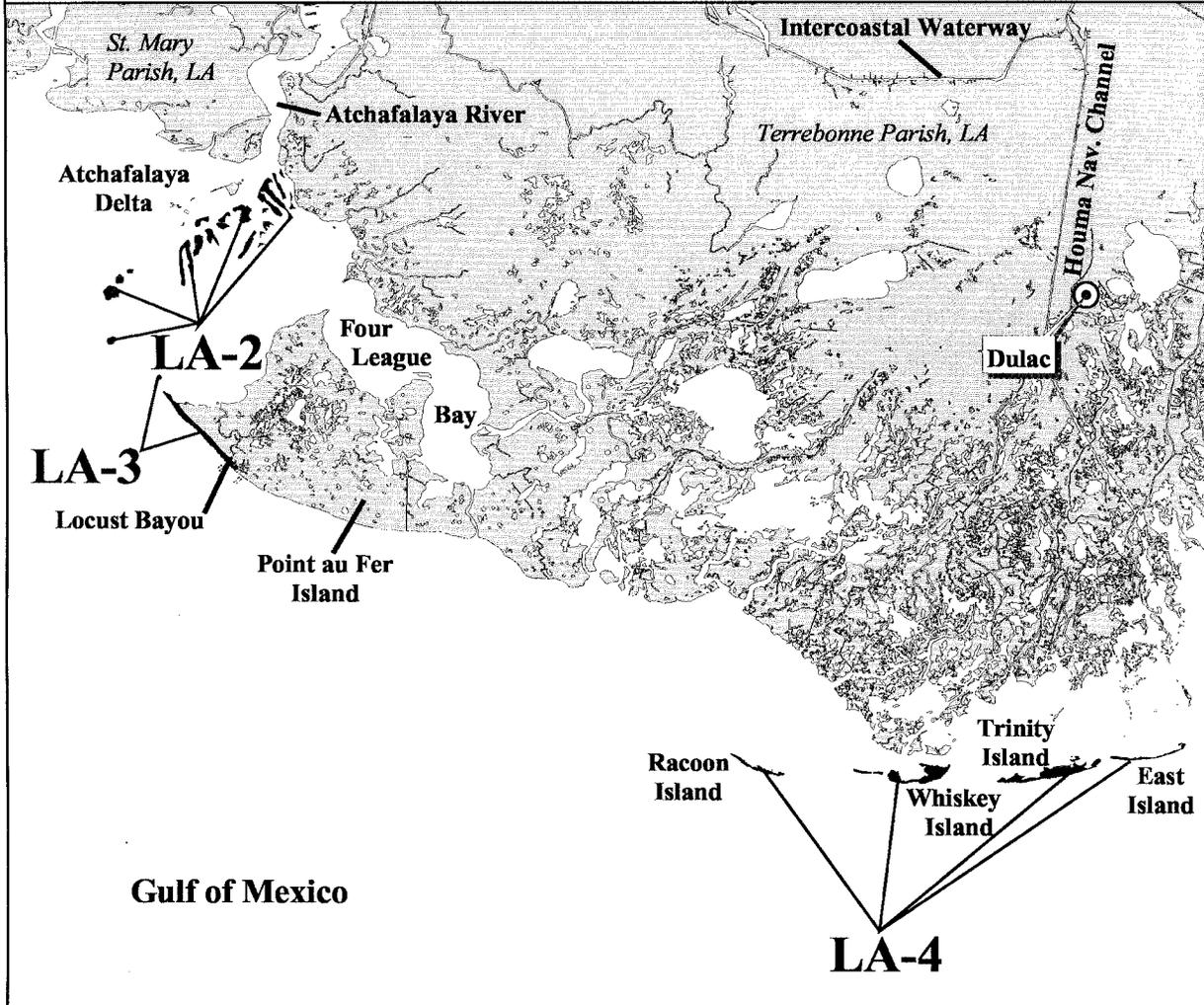
**Legend**

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

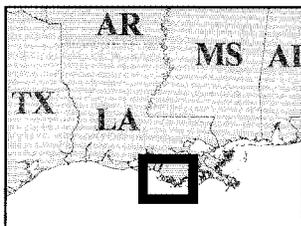
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Louisiana Unit: 1

# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



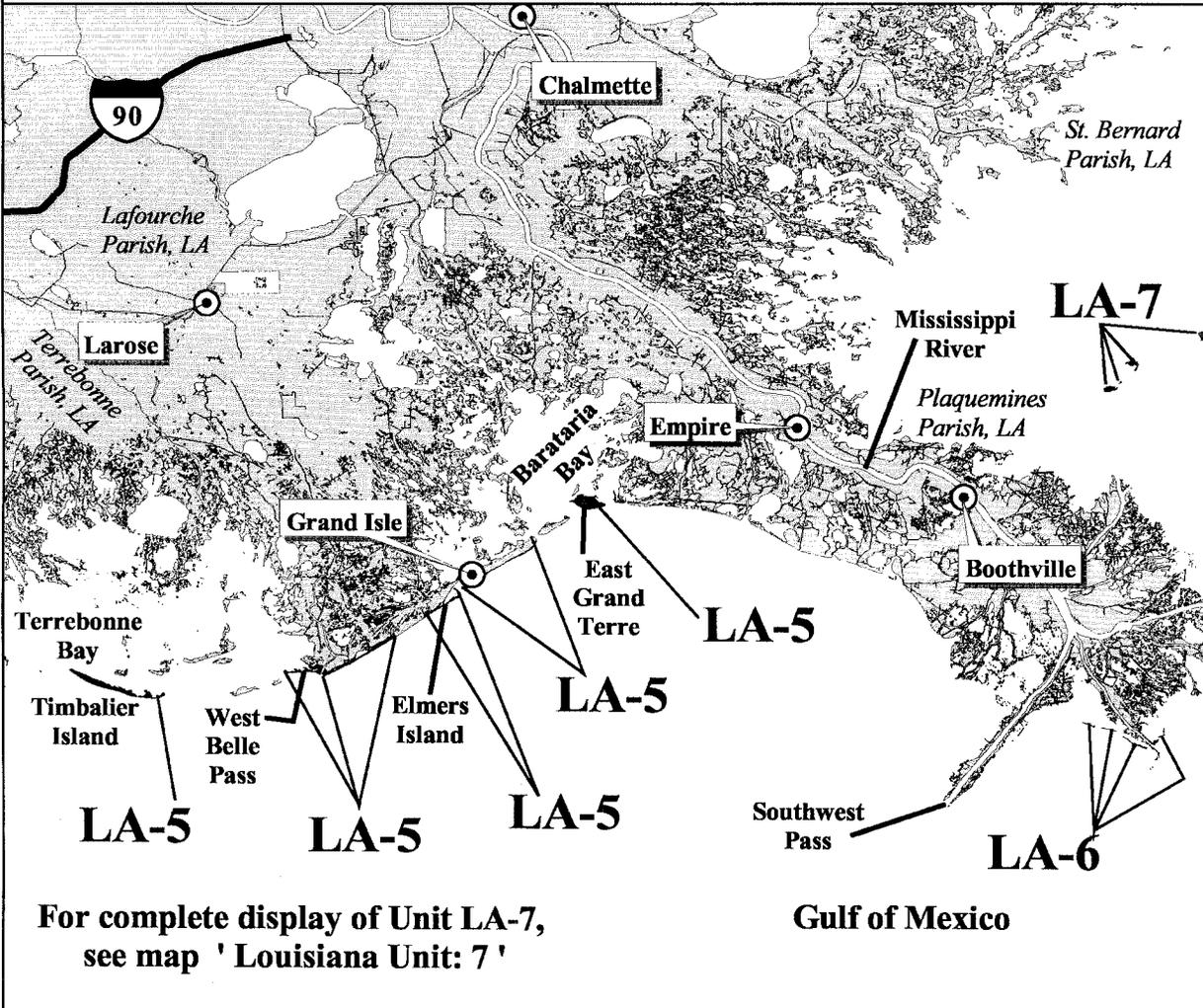
### Legend

-  City / Town
-  Major Road / Highway
-  Land
-  Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

# Louisiana Units: 2, 3, and 4

# General locations of the designated critical habitat for the Wintering Piping Plover.

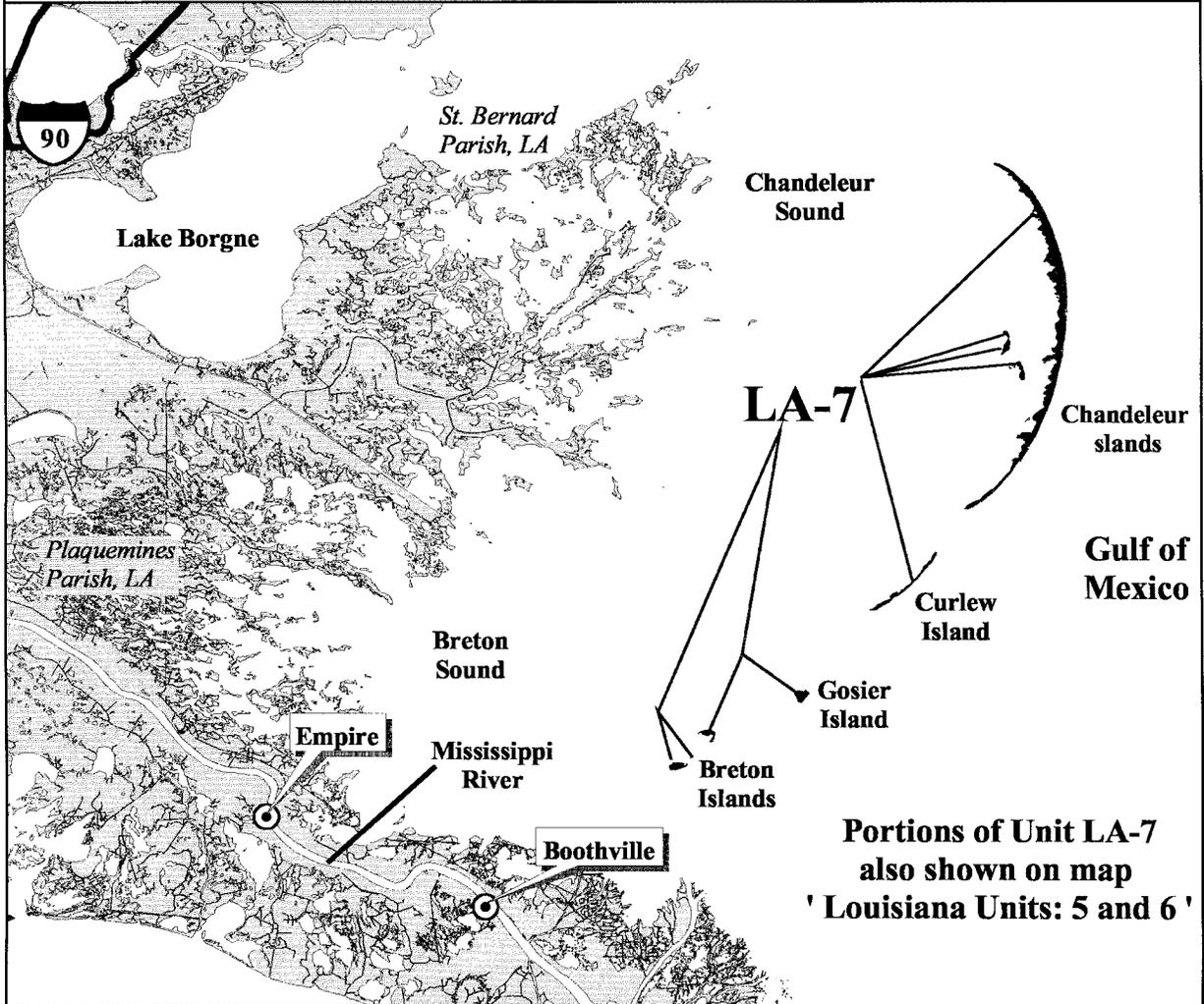


<p><b>General Area</b></p>	<p><b>Distance: Miles</b></p> <p>0 10 20</p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li> City / Town</li> <li> Major Road / Highway</li> <li> Land</li> <li> Critical Habitat</li> </ul>
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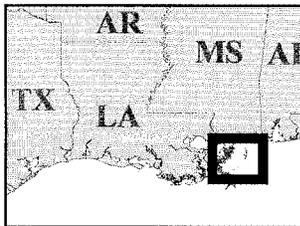
**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

## Louisiana Units: 5 and 6

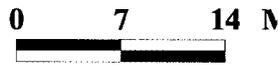
# General locations of the designated critical habitat for the Wintering Piping Plover.



### General Area



### Distance: Miles



### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

# Louisiana Unit: 7

*Texas* (Maps were digitized using 1995 and 1996 DOQQs and National Oceanic and Atmospheric Administration's (NOAA) Medium Resolution Digital Vector Shoreline)

Unit TX-1: South Bay and Boca Chica. 2,920 ha ( 7,217 ac) in Cameron County

The boundaries of the unit are: starting at the Loma Ochoa, following the Brownsville Ship Channel to the northeast out into the Gulf of Mexico to MLLW, then south along a line describing MLLW to the mouth of the Rio Grande, proceeding up the Rio Grande to Loma de Las Vacas, then from that point along a straight line north to Loma Ochoa. The unit does not include densely vegetated habitat within those boundaries. It includes wind tidal flats that are infrequently inundated by seasonal winds, and includes the tidal flats area known as South Bay. Beaches within the unit reach from the mouth of the Rio Grande northward to Brazos Santiago Pass, south of South Padre Island. The southern and western boundaries follow the change in habitat from wind tidal flat, preferred by the piping plover, to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur. The upland areas extend to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur and include areas used for roosting by the piping plover. Portions of this unit are owned and managed by the Lower Rio Grande Valley National Wildlife Refuge, the South Bay Coastal Preserve, Boca Chica State Park, and private citizens.

Unit TX-2: Queen Isabella Causeway. 2 ha (6 ac) in Cameron County

The area extends along the Laguna Madre west of the city of South Padre Island. The southern boundary is the Queen Isabella State Fishing Pier, and the northern boundary is at the shoreline due west of the end of Sunny Isles Street. The Queen Isabella causeway bisects this shore but is not included within critical habitat. The eastern boundary is where developed areas and/or dense vegetation begins, and the western boundary is MLLW. This unit contains lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-3: Padre Island. 10,924 ha (26,983 ac) in Cameron, Willacy, Kenedy, and Kleberg Counties

This unit consists of four subunits:

(1) The southern boundary of this subunit is at Andy Bowie County Park

in South Padre Island, and the northern boundary is the south boundary of PAIS. The eastern boundary is MLLW in the Gulf of Mexico, and the western boundary is MLLW in the Laguna Madre. Areas of dense vegetation are not included in critical habitat. This subunit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

(2) The boundaries of this subunit extend from Rincon de la Soledad to the southeast point of Mesquite Rincon, continue from that point west to the Laguna Madre shoreline at its intersection with the King Ranch boundary, and from that point to Rincon de la Soledad. This subunit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

(3) This subunit is within the Laguna Madre and extends from the western boundary of PAIS to the Gulf Intercoastal Waterway. Its northern boundary is a line extending westward from the northwest corner of PAIS, and its southern boundary is a line extending westward from the southern boundary of PAIS. This subunit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

(4) This subunit extends along the gulf shore of Padre Island from the northern boundary of PIAS at the shore, north to the Nueces-Kleberg county line. The inland boundary is where dense vegetation begins, and the seaward boundary is MLLW. This subunit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Portions of this unit are owned and managed by TGLO, and private citizens with a significant portion being owned and managed by The Nature Conservancy on South Padre Island.

Unit TX-4: Lower Laguna Madre Mainland. 4,980 ha (12,307 ac) in Cameron and Willacy Counties

The southern boundary is an east-west line at the northern tip of Barclay Island, and the southern boundary is an east-west line 0.9 km (0.5 mi) south of the boundary of the City of Port Mansfield; the western boundary is the line where dense vegetation begins, and the eastern boundary is the Gulf Intercoastal Waterway. The unit includes bayside flats that are exposed during low tide regimes and wind tidal flats that are infrequently inundated by seasonal winds. Portions of this unit are within the Laguna Atascosa National Wildlife Refuge, are TGLO-owned, or are privately owned. Beaches and interior wetlands may or may not be

used each year because of varying water levels, storm events, or changes in beach characteristics and tidal regime. Water stages vary in this area with meteorological conditions. The upland areas extend to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur and include upland areas used for roosting by the piping plover.

Unit TX-5: Upper Laguna Madre. 436 ha (1,076 ac) in Kleberg County

The southern boundary is the northern boundary of PAIS, and the northern boundary is the Kleberg/Nueces County line. The eastern boundary is the line where dense vegetation begins, and the western boundary is MLLW. This unit includes a series of small flats along the bayside of Padre Island in the Upper Laguna Madre. It includes wind tidal flats and sparsely-vegetated upland areas used for roosting by the piping plover. These boundaries receive heavy use by large numbers of shorebirds, including piping plovers. The upland areas extend to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur, and include upland areas used for roosting by the piping plover.

Unit TX-6: Mollie Beattie Coastal Habitat. 241 ha (596 ac) in Nueces County

This unit will be described as two subunits:

(1) Subunit is bounded on the north by Beach Access Road 3, on the east by the inland boundary of critical habitat Unit TX-7, on the south by Zahn road, and on the west by Zahn Road.

(2) The subunit is bounded on the north by Corpus Christi Pass, on the east by US 361, on the south by the north side of Packery Channel, and on the west by the Gulf Intercoastal Watersay.

Some of the uplands are privately owned and the remaining are owned and managed by the TGLO. This unit includes two hurricane washover passes known as Newport and Corpus Christi Passes, and wind tidal flats that are infrequently inundated by seasonal winds. The upland areas extend to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur and include upland areas used for roosting by the piping plover.

Unit TX-7: Newport Pass/Corpus Christi Pass Beach. 42 ha (104 ac) in Nueces County

This unit is along a stretch of Gulf beach 8.5 km (5.3 mi) long. It is

bounded on the north by Fish Pass, on the east by MLLW, on the south by St. Bartholomew Avenue, and on the west by a line marking the beginning of dense vegetation. Portions of the unit are managed by the Texas Parks and Wildlife Department as part of Mustang Island State Park. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-8: Mustang Island Beach. 97 ha (239 ac) in Nueces County

This is a stretch of Gulf beach extending from Fish Pass to the Horace Caldwell Pier on Holiday Beach within the City of Port Aransas, TX. The landward boundary is beginning of dense vegetation, and the gulf-ward boundary is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-9: Fish Pass Lagoons. 130 ha (323 ac) in Nueces County

This unit encompasses flats facing Corpus Christi Bay that extend 1.0 km (0.6 mi) on either side of Fish Pass. The inland boundary is the line indicating beginning of dense vegetation, and the bayside boundary is MLLW. It includes interior lagoons and wind tidal flats that are infrequently inundated by seasonal winds. This unit includes upland areas used for roosting by the piping plover.

Unit TX-10: Shamrock Island and Adjacent Mustang Island Flats. 87 ha (216 ac) in Nueces County

This unit encompasses Shamrock Island, an unnamed small sand flat to the north of Wilson's Cut, and a lagoon complex that extends 3.5 km (2.2 mi) to the southwest of Wilson's Cut. Critical habitat includes land to the line marking the beginning of dense vegetation down to MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-11: Blind Oso. 2 ha (5 ac) in Nueces County

This unit is the flats of the Blind Oso, part of Oso Bay, from Hans and Pat Suter Wildlife Refuge (owned and managed by the City of Corpus Christi) northeast to Corpus Christi Bay and then southeast along the edge of Texas A&M University—Corpus Christi. The landward boundaries extend to where densely vegetated habitat, not used by the piping plover, begins, and extends out from the landward boundaries to MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-12: Adjacent to Naval Air Station-Corpus Christi. 2 ha (6 ac) in Nueces County

This unit is along the shore of Oso Bay on flats bordered by Naval Air Station-Corpus Christi and Texas Spur 3 to a point 2.5 km (1.5 mi) south of the bridge between Ward Island and the Naval Air Station. The landward boundary is the line where dense vegetation begins, and the boundary in the Bay is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-13: Sunset Lake. 176 ha (435 ac) in San Patricio County

This unit is triangle shaped, with State Highway 181 as the northwest boundary, and the limits of the City of Portland as the northeast boundary. The shore on Corpus Christi Bay is the third side of the triangle, with the actual boundary being MLLW off this shore. This unit is a large basin with a series of tidal ponds, sand spits and wind tidal flats. This unit is owned and managed by the City of Portland within a system of city parks. Some of the described area falls within the jurisdiction of the TGLO. It includes two city park units referred to as Indian Point and Sunset Lake. Much of the unit is a recent acquisition by the city, and management considerations for the park include the area's importance as a site for wintering and resident shorebirds. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-14: East Flats. 194 ha (481 ac) in Nueces County

This unit is bordered on the north by dredge placement areas bordering the Corpus Christi Ship Channel, on the west by MLLW in Corpus Christi Bay, on the east by the limits of the City of Port Aransas, and on the south by an east-west line at the southern-most point of Pelone Island. It is also bisected by a navigation channel, which is not included in the critical habitat. A portion of this unit at the west end falls within State-owned (TGLO) intertidal lands. The remainder of the unit is privately owned. The upland areas extend to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur, including upland areas used for roosting by the piping plover. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-15: North Pass. 447 ha (1,106 ac) in Aransas County

The unit is bounded on north by North Pass, on the northwest by the line indicating MLLW, on the southwest by the northeast side of Lydia Ann Island, on the south by a line running due east from the northeast side of Lydia Ann Island, and on the southeast by the landward boundary of Unit. This unit is a remnant of a hurricane washover on the privately owned San Jose Island. The upland areas extend to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur, including upland areas used for roosting by the piping plover. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-16: San Jose Beach. 187 ha (463 ac) in Aransas County

This unit occupies a 33 km (20 mi) stretch of beach from the North Jetty of Aransas Pass at the south, to the confluence of Vinson Slough and Cedar Bayou at the north end of San Jose Island. The inland boundary is the line indicating the beginning of densely vegetated habitat, and the gulf-ward boundary is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-17: Allyn's Bight. 5 ha (14 ac) in Aransas County

This unit includes shoreline of San Jose Island on Aransas Bay from Allyn's Bight to Blind Pass, the channel between San Jose Island and Mud Island. The inland boundary is where the line of dense vegetation begins, and the bay-ward boundary is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-18: Cedar Bayou/Vinson Slough. 3,051 ha (7,539 ac) in Aransas County

Beginning at the confluence of Vinson Slough and Cedar Bayou, this unit's boundary follows the shore of Spalding Cove to Long Reef, then continues along a line extending (2.5 mi) southwest of Long Reef to the shore of San Jose Island, then along the shore of the island to the landward boundary of Unit TX-16. The unit boundaries extend landward to the line indicating the beginning of dense vegetation. This unit is a remnant of a hurricane washover area, and includes the highly dynamic area of Cedar Bayou, the pass that separates San Jose Island and Matagorda Island. This area includes a small

section of Matagorda Island National Wildlife Refuge with much of the remaining areas occurring on the privately owned island of San Jose. The upland areas extend to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur and include upland areas used for roosting by the piping plover. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-19: Matagorda Island Beach. 395 ha (976 ac) in Calhoun County

This stretch of beach along the Gulf of Mexico on Matagorda Island extends a distance of 60 km (36 mi) from Cedar Bayou on the southwest (where it abuts TX-18), to Pass Cavallo on the northeast. The inland boundary is the line indicating the beginning of dense vegetation, and the gulf-ward boundary is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds. The unit falls entirely within the boundary of the Matagorda Island National Wildlife Refuge.

Unit TX-20: Ayers Point. 397 ha (982 ac) in Calhoun County

This unit is an unnamed lake on Matagorda Island between Shell Reef Bayou and Big Brundrett Lake, with San Antonio Bay to the north. The unit boundary extends landward from the lake to the line where dense vegetation begins and where the constituent elements no longer occur and includes upland areas used for roosting by the piping plover. This unit includes marsh and flats at Ayers Point on Matagorda Island National Wildlife Refuge. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-21: Panther Point to Pringle Lake. 863 ha (2,133 ac) in Calhoun County

This unit represents a narrow band of bayside habitats on Matagorda Island from Panther Point to the northeast end of Pringle Lake. The landward boundary is the line indicating where dense vegetation begins, and the bayward boundary is MLLW. The unit is entirely within Matagorda Island National Wildlife Refuge. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-22: Decros Point. 450 ha (1,114 ac) at the Matagorda/Calhoun County Line

This unit includes about 7.0 km (4.3 mi) of beach habitat around the island at the western tip of Matagorda Peninsula between the natural opening to Matagorda Bay and the Matagorda Ship Channel. The upland boundary is the line where dense vegetation begins, and the seaward boundary is MLLW. The adjacent upland is privately owned. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-23: West Matagorda Peninsula Beach. 311 ha (769 ac) of Shoreline in Matagorda County

This unit extends 40 km (24 mi) along the Gulf of Mexico from the jetties at the Matagorda Ship Channel to the old Colorado River channel. The inland boundary is the line indicating where dense vegetation begins, and the gulfside boundary is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-24: West Matagorda Bay/Western Peninsula Flats. 756 ha (1,868 ac) in Matagorda County

This unit extends along the bayside of Matagorda Peninsula from 7.5 southwest of Greens Bayou to 2.5 km (1.6 mi) northwest of Greens Bayou. The landward boundary is the line indicating the beginning of dense vegetation, and the bayside boundary is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-25: West Matagorda Bay/Eastern Peninsula Flats. 232 ha (575 ac) in Matagorda County

This unit follows the bayside of Matagorda Peninsula from Maverick Slough southwest for 5 km (3 mi). The unit begins at Maverick Slough to the northeast and extends 5 km (3 mi) to the southwest, enclosing a series of flats along Matagorda Bay. The upland areas extend to where densely vegetated habitat, not used by the piping plover, begins and where the constituent elements no longer occur and include upland areas used for roosting by the piping plover. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-26: Colorado River Diversion Delta. 5 ha (13 ac) in Matagorda County

This unit follows the shore of the extreme eastern northeast corner of West Matagorda Bay from Culver Cut to

Dog Island Reef. The southeastern tidally emergent portion of Dog Island Reef is included within the unit. The landward boundary is the line indicating the beginning of dense vegetation, and the bayside boundary is MLLW. The upland areas includes upland areas used for roosting by the piping plover. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-27: East Matagorda Bay/Matagorda Peninsula Beach West. 295 (728 ac) of shoreline in Matagorda County

This unit extends along Gulf beach on the Matagorda Peninsula from the mouth of the Colorado River northeast along the peninsula 23 km (14 mi) to a point on the beach opposite Eidelbach Flats. The landward boundary is the line indicating the beginning of dense vegetation, and the gulfside boundary is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-28: East Matagorda Bay/Matagorda Peninsula Beach East. 129 ha (321 ac) in Matagorda County

This unit extends along the Gulf beach on the northeast end of Matagorda Peninsula from a point 0.8 km (0.5 mi) southwest of FM 457 southwest 10 km (6 mi.) to the southwest side of Brown Cedar Cut. This unit abuts with Unit TX-29 to the north. The landward boundary is the line indicating the beginning of dense vegetation, and the gulfside boundary is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-29: Brown Cedar Cut. 119 ha (294 ac) in Matagorda County

This unit extends 2 km (1.2 mi.) both southwest and northeast of the main channel of Brown Cedar Cut along the bayside of Matagorda Peninsula in East Matagorda Bay, and abuts unit TX-28 to the southeast. The landward boundary is the line indicating the beginning of dense vegetation, and the bayside boundary is MLLW. The eastern boundary of TX-29 follows the change in habitat from mud flats preferred by the piping plover, to slightly vegetated dune system adjacent to TX-28. This unit includes upland areas used for roosting by the piping plover. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-30: Northeast Corner East Matagorda Bay. 120 ha (297 ac) in Matagorda County

This unit is bounded on the north by the Gulf Intercoastal Waterway, on the east by the northeast limit of Matagorda bay up the line where dense vegetation begins, on the south by the boundary of Unit TX-28, and on the west by MLLW. It is a system of flats associated with tidal channels. This unit includes upland areas used for roosting by the piping plover and lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-31: San Bernard NWR Beach. 166 ha (410 ac) in Matagorda and Brazoria Counties

This is a unit composed of Gulf beach, 8.0 km (5.0 mi), and extends from the mouth of the San Bernard River to a point along the beach 14.0 km (8.7 mi) to the southwest. The landward boundary is the line indicating the beginning of dense vegetation, and the gulfside boundary is MLLW. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-32: Gulf Beach Between Brazos and San Bernard Rivers. 108 ha (269 ac) of shoreline in Brazoria County

This unit is a segment of Gulf beach between the Brazos River and the San Bernard River. This unit borders an area known as Wolf Island. The landward boundary is the line indicating the beginning of dense vegetation, and the gulfside boundary is MLLW. This unit includes lands known as wind tidal flats

that are infrequently inundated by seasonal winds.

Unit TX-33: Bryan Beach and Adjacent Beach. 157 ha (388 ac) in Brazoria County

The boundaries enclose a length of Gulf beach between the mouth of the Brazos River and FM 1495. The landward boundary is the line indicating the beginning of dense vegetation, and the gulfside boundary is MLLW. A portion of this area is owned and managed by the Texas Parks and Wildlife Department. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-34: San Luis Pass. 110 ha (272 ac) near the Brazoria/Galveston County line

This unit extends along the Gulf side of Galveston Island from San Luis Pass to the site of the former town of Red Fish Cove (USGS 1:24,000 map, San Luis Pass, Texas; 1963, photorevision 1974). The landward boundary is the line indicating the beginning of dense vegetation, and the gulfside boundary is MLLW. Approximately 57 percent of the unit includes flats in the floodtide delta that are State-owned and managed by the TGLO. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-35: Big Reef. 47 ha (117 ac) in Galveston County

This unit consists of beach and sand flats on the north, west, and east shore of Big Reef, down to MLLW. South Jetty

is not included. The area is currently managed by the City of Galveston. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-36: Bolivar Flats. 160 ha (395 ac) in Galveston County

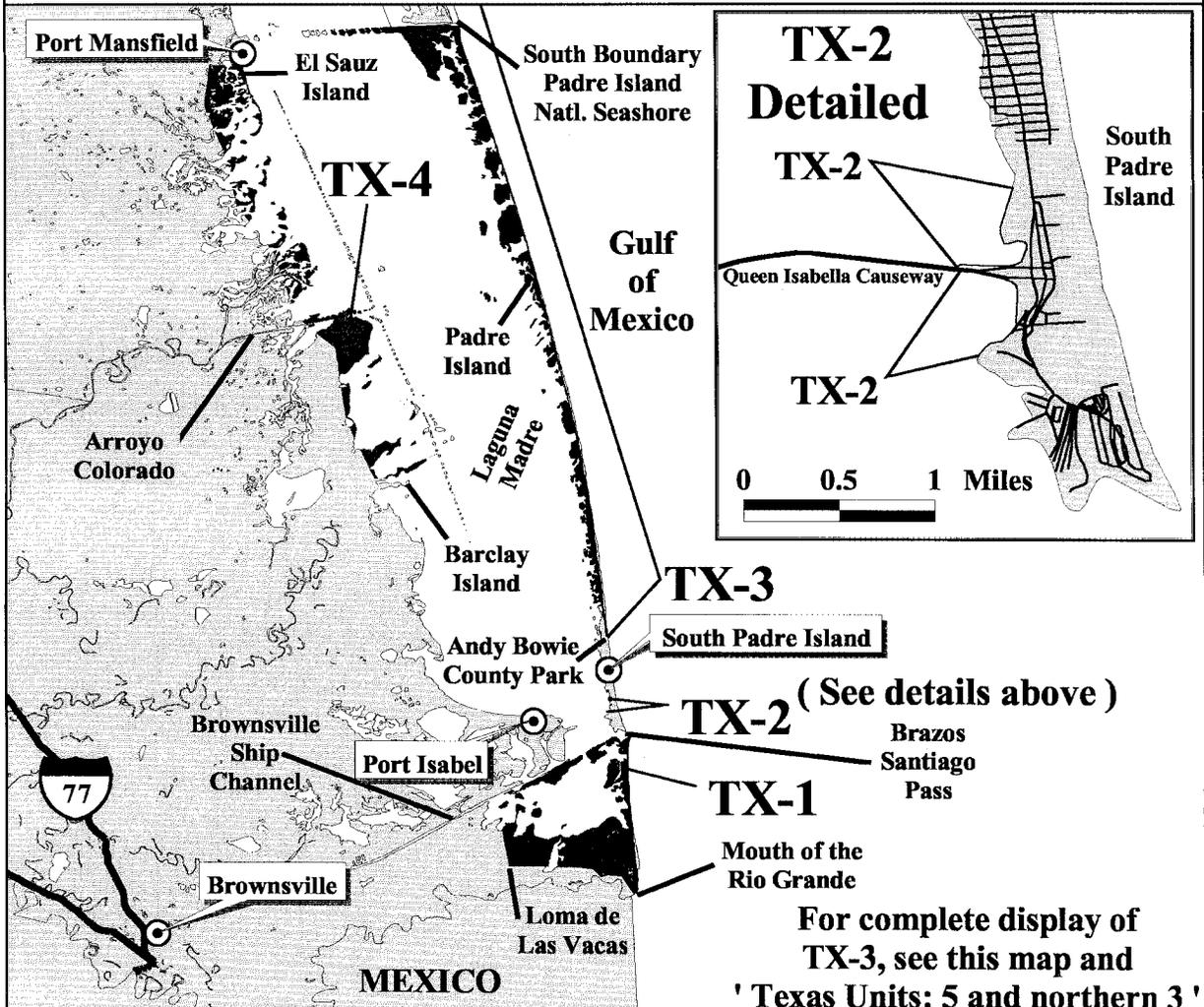
This unit extends from the jetties on the southwest end of the Bolivar Peninsula to a point on the Gulf beach 1 km (0.6 mi) north of Beacon Bayou. It includes 5.0 km (3 mi) of Gulf shoreline. The landward boundary is the line indicating the beginning of dense vegetation, and the gulfside boundary is MLLW. The area is leased from TGLO by Houston Audubon Society and managed for its important avian resources. The upland areas are used for roosting by the piping plover. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

Unit TX-37: Rollover Pass. 6 ha (16 ac) in Galveston County

This unit consists of Rollover Bay on the bayside of Bolivar Peninsula. The landward boundary is the line indicating the beginning of dense vegetation, and the bayside boundary is MLLW. It includes flats on State-owned land managed by the TGLO. This unit captures the intertidal complex of the bay, and is bounded by the towns of Gilchrist to the east and the Gulf beach of the Bolivar Peninsula to the south. This unit includes lands known as wind tidal flats that are infrequently inundated by seasonal winds.

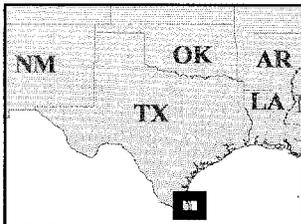
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# General locations of the designated critical habitat for the Wintering Piping Plover.



For complete display of TX-3, see this map and 'Texas Units: 5 and northern 3'

### General Area



### Distance: Miles



### Legend

- City / Town
- Major Road / Highway
- Land
- Critical Habitat

**Use Constraints:** This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.

**Texas Units: 1, 2, 4 and southern 3**