

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS-R4-ES-2024-0073;
FXES1111090FEDR-245-FF09E21000]

RIN 1018-BH47

**Endangered and Threatened Wildlife
and Plants; Critical Habitat
Designations for Florida Manatee and
Antillean Manatee**

AGENCY: Fish and Wildlife Service,
Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to revise the critical habitat designation for the Florida manatee (*Trichechus manatus latirostris*) and to designate critical habitat for the Antillean manatee (*T. m. manatus*), under the Endangered Species Act of 1973, as amended (Act). In 1976, we designated critical habitat of approximately 965,394 acres (ac) (390,681 hectares (ha)) in Florida for the Florida manatee based on where large concentrations of manatees were known to occur at the time, but no critical habitat was ever designated for the Antillean manatee subspecies. After a review of the best scientific data available, we propose to revise the existing designated critical habitat for the Florida manatee and designate critical habitat for the Antillean manatee based on the physical or biological features essential to the conservation of each subspecies. The total proposed designation for Florida manatee is 1,904,191 ac (770,599 ha) and 78,121 ac (31,614 ha) for the Antillean manatee subspecies. We also announce the availability of an economic analysis of the proposed revised designation of critical habitat for the Florida manatee and proposed designation for the Antillean manatee.

DATES: We will accept comments received or postmarked on or before November 25, 2024. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES**, below) must be received by 11:59 p.m. eastern time on the closing date. We must receive requests for a public hearing, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by November 8, 2024.

ADDRESSES: You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: <https://www.regulations.gov>. In the Search box, enter FWS-R4-ES-2024-0073, which is

the docket number for this rulemaking. Then, click on the Search button. On the resulting page, in the panel on the left side of the screen, under the Document Type heading, check the Proposed Rule box to locate this document. You may submit a comment by clicking on “Comment.”

(2) *By hard copy:* Submit by U.S. mail to: Public Comments Processing, Attn: FWS-R4-ES-2024-0073, U.S. Fish and Wildlife Service, MS: PRB/3W, 5275 Leesburg Pike, Falls Church, VA 22041-3803.

We request that you send comments only by the methods described above. We will post all comments on <https://www.regulations.gov>. This generally means that we will post any personal information you provide us (see Information Requested, below, for more information).

Availability of supporting materials: Supporting materials for the proposed critical habitat designations in this document are included in the decision file for this rulemaking and are available at <https://www.regulations.gov> at Docket No. FWS-R4-ES-2024-0073.

FOR FURTHER INFORMATION CONTACT:

Nikki Colangelo, Acting Classification and Recovery Division Manager, U.S. Fish and Wildlife Service, Florida Ecological Services Field Office, 777 37th Street, Suite D-101, Vero Beach, Florida 32960; telephone 772-226-8138. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay Services. Individuals outside the United States should use the relay Services offered within their country to make international calls to the point-of-contact in the United States. Please see Docket No. FWS-R4-ES-2024-0073 on <https://www.regulations.gov> for a document that summarizes this proposed rule.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under section 4(a)(3) of the Act, if we determine that a species is an endangered or threatened species, we must designate critical habitat to the maximum extent prudent and determinable. Revisions and designations of critical habitat designation can be completed only by issuing a rule through the Administrative Procedure Act rulemaking process (5 U.S.C. 551 *et seq.*).

What this document does. This document proposes to revise the

existing critical habitat designation for the Florida manatee and, for the reason described below, to add a critical habitat designation for the Antillean manatee. This proposed rule would remove 259,842 ac (105,154 ha) from the current Florida manatee critical habitat designation because the areas either do not meet the definition of critical habitat or they qualify for an exemption under the Act and would add 1,198,639 ac (485,072 ha) in Florida to that critical habitat designation because they meet the definition of critical habitat for the subspecies. The total proposed designation for Florida manatee is 1,904,191 ac (770,599 ha). In addition, this proposed rule would designate 78,121 ac (31,614 ha) in Puerto Rico that meet the definition of critical habitat for the Antillean manatee subspecies.

The basis for our action. Section 3(5)(A) of the Act defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. Section 4(b)(2) of the Act states that the Secretary must make the designation on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impacts of specifying any particular area as critical habitat.

The current critical habitat designation for the Florida manatee was described before critical habitat regulations were developed; it did not identify specific physical or biological features that are essential to the conservation of the subspecies. Instead, it described specific waterways that were known to be important concentration areas for Florida manatees at that time. The geographic areas originally designated as critical habitat for the Florida manatee have been reevaluated based on recent scientific studies of the subspecies' distribution, habitat use, and habitat needs. We are proposing a revised critical habitat designation for the Florida manatee based on that reevaluation. We are also proposing a critical habitat designation for the Antillean manatee because we are reassessing the listing status of the West Indian manatee (*Trichechus manatus*), and, based on the reassessment, we may propose to

reclassify the species or revise the listed entity. The West Indian manatee includes two recognized subspecies, the Antillean manatee, *Trichechus manatus manatus*, and the Florida manatee, *Trichechus manatus latirostris* (Rice 1998, p. 129). Each subspecies has distinctive morphological features and occurs in discrete areas with rare overlap between ranges (Hatt 1934, p. 538; Domning and Hayek 1986, p. 136; and Alvarez-Alemán et al. 2010, p. 148). Therefore, for the purposes of this proposed rule, we have used the subspecies to differentiate between the proposed critical habitat areas.

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other governmental agencies, Native American Tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments or information concerning:

(1) The amount and distribution of Florida manatee and Antillean manatee habitat.

(2) Any additional areas occurring within the range of either subspecies that are within the jurisdiction of the United States (the Gulf and Atlantic Coasts of the United States for the Florida manatee, and Puerto Rico and the U.S. Virgin Islands for the Antillean manatee) that should be included in the designation because they (i) were occupied at the time of listing and contain the physical or biological features that are essential to the conservation of the subspecies and that may require special management considerations or protection, or (ii) were unoccupied at the time of listing and are essential for the conservation of the subspecies.

(3) The criteria used to identify critical habitat, including the boundaries of specific areas.

(4) Special management considerations or protection that may be needed in critical habitat areas we are proposing, including managing for the potential effects of climate change.

(5) Whether areas not occupied at the time of listing qualify as habitat for the species and are essential for the conservation of the species.

(6) Land use designations and current or planned activities in the areas proposed for designation and their possible impacts on proposed critical habitat.

(7) Any probable economic, national security, or other relevant impacts of designating any area that may be included in the final designation, and the related benefits of including or excluding specific areas.

(8) Information on the extent to which the description of probable economic impacts in the economic analysis is a reasonable estimate of the likely economic impacts and any additional information regarding probable economic impacts that we should consider. This may include information on changes in activities or behaviors due to the designation of critical habitat. Such activities might occur outside occupied areas that can affect critical habitat, such as upstream projects that may affect critical habitat through effects on the physical or biological features. The Service also requests comment on whether and how consultations and project modifications may change with the revised designation in Florida or new designation in Puerto Rico.

(9) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act due to economic, national security, or other relevant impacts, and whether the benefits of potentially excluding any such area outweigh the benefits of including that area, in particular for those based on a conservation program or plan, and why. These may include Tribal, State/Territory/Commonwealth, county, local, or private lands with permitted conservation plans covering the subspecies in the area such as habitat conservation plans, safe harbor agreements, conservation easements, or non-permitted conservation agreements and partnerships that would be encouraged by designation of, or exclusion from, critical habitat. If you think we should exclude any additional areas, please provide information supporting a benefit of exclusion.

(10) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

Please note that submissions merely stating support for, or opposition to, the action under consideration without providing supporting information, although noted, do not provide substantial information necessary to

support a determination. Section 4(b)(2) of the Act directs that the Secretary shall designate critical habitat on the basis of the best scientific data available.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments only by the methods described in **ADDRESSES**.

If you submit information via <https://www.regulations.gov>, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on <https://www.regulations.gov>.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <https://www.regulations.gov>.

Our final determinations may differ from this proposal because we will consider all comments we receive during the comment period, as well as any information that may become available after this proposal. Based on new information we may receive (and, if relevant, any comments on that new information), we may modify the proposed critical habitat. Our final designations may not include all areas proposed, may include some additional areas that meet the definition of critical habitat, or may exclude some areas if we find the benefits of exclusion outweigh the benefits of inclusion and exclusion will not result in the extinction of the species. In our final rule, we will clearly explain our rationale and the basis for our final decision, including why we made changes, if any, that differ from this proposal.

Public Hearing

Section 4(b)(5) of the Act provides for a public hearing on this proposal, if requested. Requests must be received by the date specified in **DATES**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. We will schedule a public hearing on this proposal, if requested, and announce the date, time, and place of the hearing, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing. We may hold the public hearing in person or virtually via webinar. We will announce any public hearing on our website, in addition to the **Federal**

Register. The use of virtual public hearings is consistent with our regulations at 50 CFR 424.16(c)(3).

Previous Federal Actions

The Florida manatee was listed as endangered in 1967 (32 FR 4001, March 11, 1967) under the Endangered Species Preservation Act of 1966 (Pub. L. 89–669; 80 Stat. 926). After adoption of the Endangered Species Conservation Act of 1969 (Pub. L. 91–135; 83 Stat. 275), the Florida manatee listing was amended in 1970 to include the West Indian manatee (*Trichechus manatus*) throughout its range, including in northern South America (35 FR 8491, June 2, 1970). A December 2, 1970, amendment then added the Caribbean Sea to the “Where found” information in the listing entry for the West Indian (Florida) manatee, which added the Antillean manatee to the listing (35 FR 18319). The West Indian manatee was subsequently grandfathered into the List of Endangered and Threatened Wildlife under the Act in 1973 (16 U.S.C. 1531 *et seq.*). In 2017, the West Indian manatee, including both subspecies, was reclassified from endangered to threatened (82 FR 16668, April 5, 2017). We are currently reassessing the listing status of the West Indian manatee. The status determination for this species will be based on the best available information as of the time of publication. Based on the reassessment, we may propose to reclassify the species or to revise the listed entity.

Critical habitat for the Florida manatee was designated in 1976 (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977). On December 19, 2008, we received a petition from Wildlife Advocacy Project, Save the Manatee Club, Center for Biological Diversity, and Defenders of Wildlife requesting that critical habitat be revised for the Florida manatee under the Act and the Administrative Procedure Act. On January 12, 2010, we published in the **Federal Register** a 12-month finding on the petition to revise the Florida manatee critical habitat designation stating that revisions were warranted (75 FR 1574). On February 1, 2022, we received a complaint filed by the Center for Biological Diversity, Defenders of Wildlife, and Save the Manatee Club for failure to take action on the December 19, 2008, petition. On June 1, 2022, we entered into a stipulated settlement agreement resolving the litigation. Under the terms of the agreement, the Service agreed to submit a proposed rule to revise the critical habitat designation for the Florida manatee to the Office of the Federal Register on or before September

12, 2024. The timing of this proposed rule meets the stipulations of the settlement agreement.

Peer Review

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review of listing and recovery actions under the Act (<https://www.fws.gov/sites/default/files/documents/peer-review-policy-directors-memo-2016-08-22.pdf>), we are soliciting independent scientific review of this proposed rule to ensure that our proposals are based on scientifically sound data and analysis. We have invited peer reviewers to comment on our specific assumptions, methodology, and science used in these critical habitat proposals during the public comment period for this proposed rule (see **DATES**, above). We will consider any comments we receive, as appropriate, before making a final agency determination.

Regulatory Framework

Section 4 of the Act (16 U.S.C. 1533) and the implementing regulations in title 50 of the Code of Federal Regulations set forth the procedures for determining whether a species is an endangered species or a threatened species, issuing protective regulations for threatened species, and designating critical habitat for endangered and threatened species. On April 5, 2024, jointly with the National Marine Fisheries Service, we issued a final rule that revised the regulations in 50 CFR part 424 regarding how we add, remove, and reclassify endangered and threatened species and what criteria we apply when designating listed species’ critical habitat (89 FR 24300). That final rule is now in effect and is incorporated into the current regulations. Our analysis for this proposed rule applied our current regulations.

Background

Species Information

A thorough review of the taxonomy, life history, and ecology of each subspecies of the West Indian manatee (Florida and Antillean) is presented in the associated species status assessment (SSA) reports (Service 2024a, entire; Service 2024b, entire).

West Indian manatees are large, elongated marine mammals with short, paired flippers and a distinct paddle-shaped tail. The species includes two recognized subspecies, the Florida manatee and the Antillean manatee (Hatt 1934, p. 538; Rice 1998, p. 129),

that appear similar, share most common morphological characteristics, and can typically only be distinguished through skeletal measurements or genetic analysis (Hatt 1934, p. 538; Domning and Hayek 1986, p. 136; Alvarez-Alemán et al. 2010, p. 148). The two subspecies can differ in size, with the Florida manatee often larger and heavier than the Antillean manatee; however, there is overlap with the sizes (Converse et al. 1994, p. 427; Wong et al. 2012, p. 5; Castelblanco-Martínez et al. 2021, p. 7). Florida manatees may be larger as an adaptation for producing and retaining body heat, as they inhabit the northern limits (*i.e.*, coldest temperatures) of the species’ range (Johnson 2019, pp. 10–14).

The West Indian manatee’s range extends from southeastern North America to northern South America; their distribution is linked to the availability of foraging habitat and fresh water (and, for Florida manatees, warm water during the winter). The range of the Florida manatee includes the U.S. Atlantic and Gulf of Mexico coasts, as well as northern portions of the Caribbean, from the Bahamas and Cuba to Turks and Caicos (Alvarez-Alemán et al. 2010, p. 148; Melillo-Sweeting et al. 2011, p. 505; Alvarez-Alemán et al. 2018, entire; Rood et al. 2020, entire; Morales-Vela et al. 2021, entire). The Antillean manatee is found in portions of the Caribbean, including Cuba, Hispaniola, Puerto Rico, Virgin Islands, Cayman Islands, and Jamaica; in Central America from Mexico’s southeast Caribbean coast to the Caribbean coast of Panama; Trinidad and Tobago; and south to Brazil’s Atlantic coastline (United Nations Environment Programme (UNEP) 2010, entire; 81 FR 1000, January 8, 2016).

Within the United States, the Florida manatee occurs throughout the southeastern United States (*i.e.*, the northern portion of the West Indian manatee’s range). The Florida manatee’s distribution varies greatly between the warmer and colder months. In winter, because they are endothermic and cannot tolerate colder temperatures, they typically concentrate around natural warm-water springs (primarily located in northwest Florida and the St. Johns River) and artificial warm-water industrial sites, mostly power plants (currently four on the Atlantic coast and six on the Gulf coast; Irvine 1983, p. 316; Valade et al. 2020, pp. 2–3). During the warmer months (generally March through November), some Florida manatees disperse great distances and can be occasionally found as far west as Texas and as far north as Massachusetts while most remain in Florida year-

round (Deutsch et al. 2003a, pp. 20, 43; Fertl et al. 2005, entire; Deutsch et al. 2008, unpaginated; Cummings et al. 2014, entire; Cloyed et al. 2019, entire). Seasonal temperature changes are a major factor in the timing of migratory movements (Deutsch et al. 2003a, entire). While Florida manatees have a wider summer range within the United States, summer sightings outside of Florida are most common between Georgia and the Carolinas, and between coastal Alabama and Louisiana (Pabody et al. 2009, pp. 52–61; Hieb et al. 2017, pp. 321–332).

For management purposes, the Florida manatee is divided into four, relatively distinct, regional management units: an Atlantic Coast unit that occupies the east coast of Florida, including the Florida Keys and the Lower St. Johns River north of Palatka; an Upper St. Johns River unit that occurs in the river south of Palatka; a Northwest unit that occupies the Florida Panhandle south to Hernando County; and a Southwest unit that occurs from Pasco County south to Whitewater Bay in Monroe County (Service 2001, pp. 3, 12; Service 2023a, pp. 2–3; Service 2024a, p. 22). Manatees in each of these management units tend to return to the same warm-water sites each winter and have similar non-winter distribution patterns. The exchange of individuals between these units is generally limited during the winter months, but in the non-winter months, movements commonly occur between the Northwest and Southwest units and between the Upper St. Johns River and Atlantic Coast units (Deutsch et al. 2003a, entire). Movements between the East Coast and Gulf Coast of Florida are uncommon but have occurred in recent years (Service 2023a, p. 3; Service 2024a, p. 22). Throughout the rest of the document, these management units are referred to as Manatee Management Units so as not to be confused with the proposed revised critical habitat units.

Within the U.S. Caribbean territories, Antillean manatees occur in Puerto Rico and the U.S. Virgin Islands (USVI). However, Antillean manatees in the USVI are considered extremely rare and transient from Puerto Rico, with only a handful of sightings and no resident populations (Service 2023b, p. 1). Antillean manatees have been documented along the entire coast of Puerto Rico, but are detected less often along the northern coast, where seagrass beds are not as extensive (Powell et al. 1981, p. 642; Collazo et al. 2019, pp. 1345–1346). Their distribution is dependent on available resources and habitat such as fresh water, seagrass, and areas that provide shelter and

protection from strong waves (UNEP 2010, p. 69; Drew et al. 2012, p. 19; Service 2023b, p. 1). In general, Antillean manatees in Puerto Rico occur island-wide, but with relatively higher concentrations in several areas: Ceiba on the east coast, Jobos Bay area between Guayama and Salinas on the southeast coast, Guayanilla and Guánica Bay area on the southwest coast, and between Cabo Rojo and Mayagüez (Guanajibo River mouth) on the west coast (Powell et al. 1981, pp. 644–645; Rathbun et al. 1985, p. 9; Freeman and Quintero 1990, p. 15; Mignucci-Giannoni et al. 2004, p. 5; Service 2007, p. 27; Drew et al. 2012, p. 12; Collazo et al. 2019, p. 1345).

West Indian manatees use both freshwater and saltwater habitats throughout their range for survival and life-history needs, including feeding and drinking, traveling, resting, thermoregulation (*i.e.*, maintaining steady internal body temperature), mating, and nursing (Husar 1977, p. 9; 81 FR 1000 at 1004, January 8, 2016). They are commonly found in a variety of habitats including estuaries, rivers, streams, and lagoons. In some parts of Florida, manatees exclusively or primarily inhabit freshwater habitats, while Antillean manatees in Puerto Rico are primarily within coastal marine habitats and river mouths. As herbivores, manatees feed on a large variety of aquatic vegetation, generally preferring submerged, floating, and emergent vegetation in that order (Hartman 1979, p. 44). In Puerto Rico, seagrass is the main component of the Antillean manatee's diet, but they may also occasionally ingest green algae, mangrove fragments, or emergent grasses (Mignucci-Giannoni and Beck 1998, pp. 394, 396; Alves–Stanley et al. 2010, p. 265).

Where West Indian manatees use estuarine or marine habitats, they require fresh water for drinking and often seek out freshwater sources including stormwater outfalls, riverine discharges, spring systems, and other areas where they can obtain fresh water. Although they are considered good osmoregulators (*i.e.*, organisms that actively regulate the salt and water balance (osmotic balance) across membranes within the body's fluids) regardless of the environment (Ortiz et al. 1998, pp. 453–456), manatees still require fresh water to avoid dehydration. West Indian manatees seem to possess a cognitive map of a network of available freshwater sites for consumption (Flamm et al. 2005, p. 1423) that they access approximately every 3 to 16 days (Slone et al. 2018, p. 75). Since freshwater sources are less abundant in Puerto Rico than in Florida,

the distribution of the Antillean manatee may be more affected by known freshwater sites and seasonal patterns of rainfall (Lefebvre et al. 2001, p. 430; Ross et al. 2020, p. 12).

West Indian manatees tend to travel along the edges of foraging habitat (*e.g.*, seagrass beds), along shoreline differential depth changes, and in and near channels (81 FR 1000 at 1004, January 8, 2016). They use sheltered areas including bays, boat basins, and canals to rest and feed, and for mothers to give birth and nurse their offspring (Reid et al. 1995, pp. 183, 188; Deutsch et al. 2003a, p. 52; Drew et al. 2012, p. 24).

Critical Habitat

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define the geographical area occupied by the species as an area that may generally be delineated around species' occurrences, as determined by the Secretary (*i.e.*, range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (*e.g.*, migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals).

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that each Federal action

agency ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of designated critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation also does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Rather, designation requires that, where a landowner requests Federal agency funding or authorization for an action that may affect an area designated as critical habitat, the Federal agency consult with the Service under section 7(a)(2) of the Act. If the action may affect the listed species itself (such as for occupied critical habitat), the Federal agency would have already been required to consult with the Service even absent the designation because of the requirement to ensure that the action is not likely to jeopardize the continued existence of the species. Even if the Service were to conclude after consultation that the proposed activity is likely to result in destruction or adverse modification of the critical habitat, the Federal action agency and the landowner are not required to abandon the proposed activity, or to restore or recover the species; instead, they must implement “reasonable and prudent alternatives” to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act’s definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat).

Under the second prong of the Act’s definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information from the SSA report and information developed during the listing process for the species. Additional information sources may include any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; articles in peer-reviewed journals; conservation plans developed by States and counties; scientific status surveys and studies; biological assessments; other unpublished materials; or experts’ opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) the prohibitions found in section 9 of the Act. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas

may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of the species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of those planning efforts calls for a different outcome.

Physical or Biological Features Essential to the Conservation of the Subspecies

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas we will designate as critical habitat from within the geographical area occupied by the species at the time of listing, we consider the physical or biological features that are essential to the conservation of the species, and which may require special management considerations or protection. The regulations at 50 CFR 424.02 define “physical or biological features essential to the conservation of the species” as the features that occur in specific areas and that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity. For example, physical features essential to the conservation of the species might include gravel of a particular size required for spawning, alkaline soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or absence of a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic essential to support the life history of the species.

In considering whether features are essential to the conservation of the species, we may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

Basic habitat needs of both subspecies of West Indian manatee include forage, fresh water, shelter, travel corridors, and warm water (Husar 1977, p. 9; Drew et al. 2012, p. 19; 81 FR 1000 at 1004, January 8, 2016). However, the two subspecies of West Indian manatee inhabit different portions of the species' broader range and experience different habitat conditions; therefore, we have determined they require different physical or biological features for their conservation.

Since the Florida manatee inhabits the northern portion of the species' range and the species is cold-intolerant, the most significant habitat features for the conservation of the subspecies are warm water and winter forage availability (81 FR 1000 at 1011, January 8, 2016), specifically the proximity of forage material to warm-water sites (Packard 1984, entire; Deutsch et al. 2003b, p. 3; Deutsch et al. 2006, p. 21; Provancha et al. 2012, p. 4; Deutsch and Barlas 2016, p. 7; Haase et al. 2020, entire). The Antillean manatee inhabits the warmer southern portion of the species' range and does not face the same cold-stress risk as the Florida manatee. However, in Puerto Rico, freshwater sources and sheltered areas are less common than in Florida due to its island nature. Therefore, the key habitat features necessary for Antillean manatee conservation are seagrass, shelter, and fresh water, also within proximity of each other (Powell et al. 1981, p. 641; Drew et al. 2012, pp. 8, 19).

Florida Manatee

Florida manatees require stable, long-term sources of warm water, such as natural springs, during colder months to survive. An ambient water temperature of 68 degrees Fahrenheit (°F) (20 degrees Celsius (°C)) has been identified as a temperature threshold when many Florida manatees begin to migrate south or seek out warm-water refuges, such as natural springs, industrial outflows, and

passive thermal basins (areas such as natural deep holes, canals, and basins, where thermoclines, inverted haloclines, and other physical conditions slow the localized water column cooling processes and temporarily retain pockets of relatively warm water (Hartman 1979, pp. 17, 23; Deutsch et al. 2003a, pp. 22–25; Laist and Reynolds 2005, p. 280; Stith et al. 2006, entire; Valade et al. 2020, pp. 3, 33)). These warm-water sites act as a buffer to the lethal effects of cold temperatures.

In the two southernmost Florida Manatee Management Units (Southwest and Atlantic Coast), Florida manatees depend most heavily on industrial warm-water outfalls, primarily power plant cooling systems; in the two northernmost management units (Upper St. Johns River and Northwest), Florida manatees rely almost exclusively on natural springs (Laist et al. 2013, p. 4). Passive thermal basins are more commonly used by larger aggregations in the south and central part of Florida since these thermal basins can cool during intense or long periods of cold weather (Valade et al. 2020, p. 3). Statewide, from 1999–2011, 48.5 percent of all Florida manatees observed during winter counts were counted at power plant outfalls, 17.5 percent were at natural springs, and 11.7 percent were at passive thermal basins, leaving only 22.3 percent that were at other locations with no known warm-water feature (Laist et al. 2013, p. 4). During extreme cold weather in 2010, the percentage of the manatee population using power plant outfalls and natural springs increased to 63.2 and 18.3 percent, respectively (Laist et al. 2013, p. 4). The potential future reduction of warm water output at both natural and industrial sites is one of the leading threats the Florida manatee faces in the future and is discussed in detail in the Florida Manatee Warm-Water Habitat Action Plan (WWHAP; Valade et al. 2020, pp. 7–9) and our SSA report (Service 2024a, pp. 40–45).

Florida manatees show strong site fidelity, often returning to the same warm-water refuge(s) each winter (Rathbun et al. 1990, pp. 11, 23; Reid et al. 1991, p. 185; Deutsch et al. 2003a, pp. 33–36). Most manatees are familiar with the location of multiple warm-water sites, mostly within single Manatee Management Units or smaller areas (e.g., northern Indian River Lagoon; Reid et al. 1991, p. 185; Langtimm et al. 1998, p. 984; Deutsch et al. 2003a, pp. 37–38, 47). Power plants, which provide winter refuges for approximately one-half to two-thirds of the Florida manatee population (Laist et

al. 2013, p. 4), are not permanent reliable sources of warm water. In the past, some industrial sources of warm water have been eliminated due to plant obsolescence, environmental permitting requirements, economic pressures, and other factors (Deutsch et al. 2003a, p. 66; 81 FR 1000 at 1015, January 8, 2016). During temporary power plant shutdowns, manatees have been observed to use less preferred nearby sites (Packard et al. 1989, entire). However, in other cases where thermal discharges have been eliminated, manatees have died due to site fidelity and lack of other nearby significant warm-water sites (Deutsch et al. 1999, entire). Therefore, in response to potential future reductions of industrial warm-water outfalls, the WWHAP outlines management strategies and actions to establish a network of warm-water sources to meet Florida manatee conservation goals and reduce their dependence on industrial warm-water discharges (Valade et al. 2020, pp. 14–23). Likewise, enhancing existing natural refuges and investigating alternate warm-water sources at or near important industrial warm-water refuges are actions identified in the Florida Manatee Recovery Plan (Service 2001, pp. 84–87).

The WWHAP (Valade et al. 2020, entire) provides an inventory and classification system for all known warm-water sources in Florida. It identifies 75 warm-water sites throughout the State and classifies them as either primary, secondary, or potential warm-water refuges based on thermal quality and manatee use (Valade et al. 2020, pp. 25–32). Thermal quality is defined in the WWHAP as either high, medium, low, or unknown (Valade et al. 2020, p. 32). Refuges are considered to have high thermal quality if water temperatures stay at or above 72 °F (22 °C) during mild, cold, or severe cold weather. Refuges have medium thermal quality if water temperatures stay at or above 72 °F (22 °C) during mild weather, 68 °F (20 °C) during cold weather, and 64 °F (18 °C) during severe cold weather. Refuges have low thermal quality if water temperatures are at or above 68 °F (20 °C) during mild weather, are at or above 61 °F (16 °C) during cold weather and are unreliable during severe cold weather. If temperature data have not been collected or are insufficient for a site, then that site is considered a refuge with unknown thermal quality. Manatee use is also defined in the WWHAP as either established, unpredictable, or unknown (Valade et al. 2020, p. 31). Refuges with established manatee use have consistent

or predictable manatee use throughout the winter and are regionally important. Unpredictable manatee use means that their use of the refuge is inconsistent, and unknown use means that the site has been reported to have some current or historical manatee use but there is little or no documentation.

Twenty warm-water sites (9 springs, 5 passive thermal basins, and 6 power plants) are classified as primary refuges, which indicates that they have reliable thermal quality throughout the winter (*i.e.*, high or medium thermal quality) and most have established manatee use in all winter conditions (Valade et al. 2020, pp. 25–30). Forty-six warm-water sites (13 springs, 29 passive thermal basins, and 4 power plants) are classified as secondary refuges, meaning they typically have medium or low thermal quality and established or unpredictable manatee use (Valade et al. 2020, pp. 25–30). Six warm-water sites (4 springs, 1 passive thermal basin, and 1 power plant) are classified as potential warm-water refuges due to little, no, or unknown current manatee use; unknown thermal attributes; limited or no access; or discontinued discharges, in the case of the power plant. For each of these six warm-water sites, there may be historical records of manatee use or the site's thermal attributes are known and suggest the site has potential as a warm-water refuge (Valade et al. 2020, pp. 25–30).

Because Florida manatees require reliable sources of warm water with ambient water temperature above 68 °F (20 °C), we determined all natural warm-water sites classified as primary refuges in the WWHAP (Valade et al. 2020, pp. 25–30) are essential to the conservation of the Florida manatee. We also determined that natural warm-water sites classified as secondary refuges with either reliable (high or medium) thermal quality or established manatee use in the WWHAP (Valade et al. 2020, pp. 25–30) are essential to the conservation of the Florida manatee.

During the winter months, hundreds of manatees can gather at some warm-water sites and limit their movements until water temperatures begin to rise. They become central-place foragers using warm-water sites as their starting points to make feeding trips, generally within 18.6 miles (mi) (30 kilometers (km)) (Packard 1984, entire; Deutsch et al. 2003b, p. 3; Deutsch et al. 2006, p. 21; Provancha et al. 2012, p. 4; Deutsch and Barlas 2016, p. 7; Haase et al. 2020, entire). As water temperatures decrease below about 68 °F (20 °C), time spent foraging away from warm-water refuges decreases (Deutsch et al. 2006, p. 26; Deutsch and Barlas 2016, pp. 30–52, 92;

Haase et al. 2020, p. 275). As water temperatures warm, the distance Florida manatees travel to forage increases.

As herbivores, Florida manatees forage on a large variety of aquatic vegetation in freshwater, estuarine, and marine systems, including submerged, floating, and emergent vegetation (Hartman 1979, p. 44). In freshwater systems, manatees commonly forage on submerged aquatic vegetation such as the native eel grass (*Vallisneria americana*; also known as wild celery or tape grass), coontail (*Ceratophyllum demersum*), and widgeongrass (*Ruppia maritima*); nonnative, invasive submerged species such as hydrilla (*Hydrilla verticillata*; also known as waterhyme) and Eurasian watermilfoil (*Myriophyllum spicatum*); and the nonnative, invasive floating common water hyacinth (*Eichhornia crassipes*) (Best 1981, pp. 8–9). In marine and estuarine systems, Florida manatees forage on all seven species of seagrasses, with manatee grass (*Syringodium filiforme*), shoal grass (*Halodule wrightii*), turtle grass (*Thalassia testudinum*), and widgeongrass being common forage species (Hartman 1979, p. 46; Reich and Worthy 2006, p. 306). With the exception of widgeongrass, seagrasses are largely absent in northeast Florida, and the emergent species smooth cordgrass (*Sporobolus alterniflorus*; previously *Spartina alterniflora*) is the primary forage (Baugh et al. 1989, entire).

The depth at which manatees feed is reliant upon tides and depth of vegetation. In Florida, manatees predominantly feed on seagrass in near-shore, shallow waters averaging 3.3 to 9.8 feet (ft) (1 to 3 meters (m)) in depth (Smith 1993, p. 12). Although some areas have seen some increases or stability in forage for manatees, the total acreage of seagrass in Florida today is less than what it was in the 1950s (Yarbro and Carlson 2016, p. 3). The loss of foraging habitat, especially in the Indian River Lagoon on Florida's east coast, is a significant threat to the Florida manatee and is discussed in more detail in the Florida Manatee Stock Assessment Report and our SSA report (Service 2023a, pp. 16–17; Service 2024a, pp. 38–40).

Therefore, based on the information above, we identify natural warm-water refuges with either reliable thermal quality throughout the winter or established manatee use each year as a physical or biological feature essential to the conservation of the Florida manatee. We also identify foraging areas (*i.e.*, areas that support submerged, emergent, or floating aquatic vegetation) within 18.6 mi (30 km) of the above

identified natural warm-water refuges as a physical or biological feature essential to the conservation of the subspecies. Since Florida manatees have a strong site fidelity to warm-water refuges (Rathbun et al. 1990, pp. 11, 23; Reid et al. 1991, p. 185; Deutsch et al. 2003a, pp. 33–36), approximately one-half to two-thirds of all manatees observed during winter counts were aggregated at power plant outfalls (Laist et al. 2013, p. 4), and forage availability near winter manatee aggregations is essential (Packard 1984, entire; Deutsch et al. 2003b, p. 3; Deutsch et al. 2006, p. 21; Provancha et al. 2012, p. 4; Deutsch and Barlas 2016, p. 7; Haase et al. 2020, entire), we also identify foraging areas within 18.6 mi (30 km) of other established winter manatee aggregations areas (*i.e.*, power plants with established manatee use) as a physical or biological feature essential to the conservation of the Florida manatee.

Antillean Manatee

To address actions in the recovery plan for the Puerto Rico population of the Antillean manatee (Service 1986, pp. 13, 17) and 5-year status review (Service 2007, p. 37), the Service identified potential manatee protection areas in the “Science Summary in Support of Manatee Protection Area Design in Puerto Rico” (Drew et al. 2012, entire). Even though these areas were not designated as manatee protection areas, the habitat models and methodology used to identify areas of importance to the survival of the subspecies (Drew et al. 2012, entire) provide significant insight into the physical or biological features essential to the conservation of the subspecies in Puerto Rico.

Since fresh water is a limiting factor for manatees in Puerto Rico, local movement patterns are defined by freshwater resources. More than 85 percent of manatees detected during aerial and telemetry surveys in Puerto Rico were within 3 mi (5 km) of natural or artificial freshwater sources (Powell et al. 1981, p. 642; Slone et al. 2006, pp. 2, 8; Drew et al. 2012, p. 8). Manatees have been documented using a variety of freshwater sources in Puerto Rico, including mouths of streams and rivers, coastal groundwater springs, industrial wastewater (*e.g.*, wastewater treatment plants, hydroelectric power plants), storm sewer outflows, natural intermittent drainages through coastal forests, and watering stations set out on boats or docks by locals and tourists (Powell et al. 1981, pp. 642, 644; Rathbun et al. 1985, pp. 19–20; Drew et al. 2012, pp. 23–24). Watering stations at boats or docks are not static or

reliable sources of fresh water and are therefore difficult to model spatially. Groundwater discharge, though it has not been confirmed, may be a significant source of fresh water for manatees, but is also difficult to model spatially as it is likely not a point source discharge (Drew et al. 2012, p. 56).

Seagrass is the main component of the Antillean manatee's diet in Puerto Rico (Mignucci-Giannoni and Beck 1998, pp. 394, 396; Alves-Stanley et al. 2010, p. 265). Of the four species of seagrass found in Puerto Rico, only three were found to be common forage (turtle grass, shoal grass, and manatee grass; Mignucci-Giannoni and Beck 1998, p. 396), as star grass (*Halophila decipiens*) predominantly occurs in deeper water (33–98 ft (10–30 m); Drew et al. 2012, p. 20). Although manatees in Puerto Rico regularly travel through deep water when moving between local resources, they typically do not feed or rest in waters deeper than 43 ft (13 m) and spend most of their time in waters less than 16 ft (5 m) deep (Drew et al. 2012, p. 19).

Due to its island nature, Puerto Rico's coastline has limited areas that provide shelter and calm waters for manatees to feed, rest, calve, and provide parental care. Sheltered water in Puerto Rico has been identified as shallow bays and coves (less than 9.8 ft (3 m) deep) with low wave energy (less than 0.98 ft (0.3 m) wave height) (Drew et al. 2012, p. 8). Wave energy was modeled based on a function of prevailing wind speed and direction in relation to coastal landforms (Drew et al. 2012, p. 8).

Available tracking data in Puerto Rico confirmed that manatees may have both restricted movement patterns (*i.e.*, movement within a single bay area) and move longer distances as well throughout several coastal municipalities (Slone et al. 2006, p. 3). For example, manatees were documented moving from the east coast of Puerto Rico in Naguabo to Vieques Island (approximately 8.7 mi (14 km)) and from Guanajibo on the west coast to Guánica on the southwest and back, a distance greater than 37.3 mi (60 km) one way (Slone et al. 2006, p. 3). More localized movement patterns were typically movements between freshwater and seagrass resources (Slone et al. 2006, p. 3). In addition, 85.8 percent of manatees detected during aerial surveys in Puerto Rico were within 3 mi (5 km) of a natural or artificial freshwater resource (Powell et al. 1981, p. 642). Based on that information, a 3-mi (5-km) radius was used to identify the potential manatee protection areas in Puerto Rico (Drew et al. 2012, p. 8). This value was confirmed

as reasonable based on preliminary telemetry data of manatees along the Puerto Rican coastline (Slone et al. 2006, entire) and expert elicitation (Drew et al. 2012, p. 8).

Using the available geospatial modeling (Drew et al. 2012, entire) with the addition of updated manatee observations (Atkins Caribe, LLP 2012, 2013, 2014a, and 2014b, entire; Mignucci-Giannoni 2021, entire) and seagrass data (National Oceanic and Atmospheric Administration (NOAA) 2022, entire), we identified that manatees along the Puerto Rican coastline aggregate in areas that contain at least two of the three resources discussed (fresh water, seagrass, and shelter). While the shelter model should still be accurate, we recognize that not all freshwater sources are represented in the freshwater resources model due to the difficulty in spatial modelling (*e.g.*, groundwater seepage, intermittent stream discharges, etc.) and potential changes in freshwater output locations or flows (Drew et al. 2012, entire). We also recognize that the seagrass data layers could also be slightly inaccurate due to potential misidentification of benthic signatures from aerial imagery (*e.g.*, misidentifying coral or rocky bottom as seagrass or vice versa) and fluctuations in seagrass coverage over time.

Therefore, based on the information above, we identify as the physical or biological feature essential to the conservation of the Puerto Rican population of the Antillean manatee nearshore marine waters with at least two of the following resources within a 3-mi (5-km) radius: seagrass in waters less than 43 ft (13 m) deep; freshwater sources; and calm waters, such as shallow bays and coves, with water depths less than 9.8 ft (3 m) and wave heights less than 0.98 ft (0.3 m).

Summary of Essential Physical or Biological Features

We derive the specific physical or biological features essential to the conservation of Florida manatee and Antillean manatee from studies of the subspecies' habitat, ecology, and life history as described below. Additional information can be found in the WWHAP (Valade et al. 2020, entire), "Science Summary in Support of Manatee Protection Area Design in Puerto Rico" (Drew et al. 2012, entire), and the SSA reports (Service 2024a, pp. 17–33; Service 2024b, pp. 15–34). Since the two subspecies of West Indian manatee live in different areas of the species' range and experience different habitat conditions, we have determined they require different physical or

biological features for their conservation. We have determined that the following physical or biological features are essential to the conservation of Florida manatee:

- (1) Areas of water warmed by natural processes (*e.g.*, spring discharges, passive thermal basins) that have either:
 - (a) Reliable thermal quality throughout the winter (*i.e.*, having at least a medium thermal quality as defined by the Florida Manatee WWHAP (Valade et al. 2020, pp. 25–32)), which consists of water temperatures that stay at or above:
 - (i) 72 degrees Fahrenheit (°F) (22 degrees Celsius (°C)) during mild weather,
 - (ii) 68 °F (20 °C) during cold weather, and
 - (iii) 64 °F (18 °C) during severe cold weather; or
 - (b) Established manatee use throughout the winter each year (see the Florida Manatee WWHAP (Valade et al. 2020, pp. 25–32)).
- (2) Areas supporting submerged, emergent, or floating aquatic vegetation within 18.6 miles (30 kilometers) of:
 - (a) The natural warm-water sources described in paragraph (1), above; or
 - (b) Other established winter manatee aggregation areas (*i.e.*, power plants with established manatee use.

We have determined that the following physical or biological feature essential to the conservation of Antillean manatee is nearshore marine waters with at least two of the following resources within a 3-mile (5-kilometer) radius:

- (1) Freshwater sources, such as streams and wastewater outfalls;
- (2) Seagrass in waters less than 43 ft (13 m) deep; and
- (3) Calm waters, such as shallow bays and coves, with water depths less than 9.8 ft (3 m) and wave heights less than 0.98 ft (0.3 m).

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of manatees may require special management considerations or protection. Threats to Florida and Antillean manatees are described in detail in the SSA reports (Service 2024a, pp. 33–65; Service 2024b, pp. 35–47). The threats and associated special management considerations or protection addressed in this document are specific to the physical or biological features essential to the conservation of the subspecies. For Florida and Antillean manatee habitat, we grouped primary threats into the following six

threat categories. Each of these threats and associated special management considerations or protection are summarized below.

(1) *Warm-water habitat loss.* Florida's natural springs have had substantial declines in flows and water quality, and many springs have been altered (dammed, silted in, and otherwise obstructed) to the point that they are no longer accessible to manatees (Laist and Reynolds 2005, p. 287; Taylor 2006, pp. 5–6; Florida Fish and Wildlife Conservation Commission (FWC) 2007, p. 10). Threats to passive thermal basins and other warm-water features used by manatees in winter include the loss of thermal capacity due to human activities such as development and restoration activities and changes to physical or hydrological features integral to individual thermal basins (Valade et al. 2020, p. 10). Examples of special management considerations or protection that could reduce the threat of warm-water habitat loss may include (but not be limited to): establishing and maintaining minimum flows and levels for springs, lakes, and rivers; conducting spring run restoration projects (e.g., remove excess sediment, stabilize creek banks) and removing or modifying dams and locks to improve access; and enhancing existing warm-water refuges or creating alternate warm-water refuges.

(2) *Habitat loss, modification, and degradation other than warm-water habitat loss.* Human activities that can result in the loss of aquatic vegetation as food resources include dredging, filling, boating, anchoring, eutrophication, siltation, coastal development, and invasive or nuisance aquatic vegetation treatments (Zieman and Zieman 1989, pp. 88–96; Duarte 2002, p. 194; Orth et al. 2006, p. 991; Puerto Rico Department of Natural and Environmental Resources (PRDNER) 2008, entire; PRDNER 2012, entire). Harbor deepening and other dredging projects can also impact areas used as shelter habitat. Examples of special management considerations or protection that could reduce the threat of foraging and other habitat loss, modification, or degradation may include (but not be limited to): improving water quality through reductions in nutrient inputs from stormwater, septic tanks, and fertilizers; restoring aquatic vegetation, living shorelines, and filter feeders to prevent and mitigate habitat loss and improve water quality; coordinating with the Service prior to treatments of invasive or nuisance aquatic vegetation and limiting treatments that could reduce vegetation availability during the cold

season; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; and developing or revising and implementing standardized construction conditions for in-water construction projects such as marinas, boat ramps, or dredging to avoid or minimize direct impacts to vegetation and indirect effects such as from shading by structures.

(3) *Algal blooms.* Persistent and repeated green and brown algal blooms have resulted in significant losses of seagrasses on the east-central coast of Florida due to decreased water clarity and quality (St. Johns River Water Management District (WMD) 2012, pp. 2–3; Service 2023a, p. 16). Red tide events, caused by blooms of the toxic microalgae *Karenia brevis*, most frequently occur on the Gulf Coast of Florida. These blooms are typically associated with direct mortality of manatees due to the ingestion of neurotoxins released by *K. brevis* that accumulate in seagrass (Landsberg et al. 2009, p. 600; Steidinger 2009, p. 555); however, large and prolonged events have the potential to cause seagrass loss due to light reduction (Lee et al. 2007, entire; Kim et al. 2015, entire). Examples of special management considerations or protection that could reduce the threat of algal blooms may include (but not be limited to): improving water quality through reductions in nutrient inputs from stormwater, septic tanks, and fertilizers; restoring aquatic vegetation and filter feeders to improve water quality; and removing nutrient-laden sediments from inshore waters.

(4) *Climate change, including water temperature increases, sea level rise, and changes in amount and seasonality of rainfall.* Potential impacts of climate change to manatee habitat include loss and degradation of foraging habitat and changes in warm-water and freshwater availability. Increasing water temperatures will likely affect estuarine and freshwater systems and the seagrass and other forage plant communities by influencing photosynthetic rates and biomass, changing plant communities and growth of competitors, changing aspects of life history, and/or shifting the distribution if physiological tolerances are exceeded (Short and Neckles 1999, pp. 172–175; Björk et al. 2008, pp. 21–23). Sea level rise may influence the flow of coastal springs, the springs' salinity, and nearby forage (Edwards 2013, pp. 731–734; Marsh et al. 2017, pp. 337). Examples of special management considerations or protection that could reduce the threat of climate change may include (but not

be limited to): establishing and maintaining minimum flows and levels for springs, lakes, and rivers; and restoring submerged and emergent aquatic vegetation and living shorelines to prevent and mitigate habitat loss.

(5) *Contaminants.* Direct and indirect exposure to contaminants in aquatic and benthic habitats is another factor that may have adverse effects on manatees and their habitat (Bonde et al. 2004, p. 258). Contaminants generated from agriculture, human wastewater, oil and gas production or spills, and general urban runoff are among those discharged into waterways and sediments. Examples of special management considerations or protection that could reduce the threat of contaminants may include (but not be limited to): improving water quality through reductions in nutrient inputs from stormwater, septic tanks, and fertilizers; and developing or revising and implementing oil spill response with manatee and aquatic vegetation considerations.

(6) *Tropical storms and hurricanes.* Aquatic vegetation can be impacted by scouring and sedimentation from waves, storm surge, and/or vessels or other debris during tropical storms and hurricanes (NOAA 2007, pp. 94–96). Post-storm effects include increased freshwater runoff and nutrient loading that in some cases contribute to algal blooms that can limit light to submerged aquatic vegetation and in turn diminish seagrasses (NOAA 2007, pp. 94–96). Debris from storms or erosion from nearby areas also can limit or completely block access to foraging and warm-water sites. Examples of special management considerations or protection that could reduce the threat of tropical storms and hurricanes may include (but not be limited to): restoring submerged and emergent aquatic vegetation and living shorelines to mitigate and prevent habitat loss; and developing or revising and implementing marine debris removal guidance with manatee and aquatic vegetation considerations.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the subspecies and identify specific areas within the geographical area occupied by the subspecies at the time of listing and any specific areas outside the geographical

area occupied by the subspecies to be considered for designation as critical habitat. We are not currently proposing to designate any areas outside the geographical area occupied by the subspecies because we have not identified any unoccupied areas that meet the definition of critical habitat. No unoccupied areas were determined to be essential to the conservation of either subspecies.

As stated above under Physical or Biological Features Essential to the Conservation of the Subspecies, since the two subspecies of West Indian manatee live in different portions of the species' range and experience different habitat conditions, we have determined they require different physical or biological features for their conservation. Therefore, we also used different criteria and methods for identifying critical habitat for each subspecies, as described below.

Florida Manatee

In general, for areas within the geographical area occupied by the Florida manatee subspecies at the time of listing (*i.e.*, currently occupied), we delineated critical habitat boundaries within the accessible waters where manatees have consistently aggregated around warm-water refuges during the colder months, and foraging habitat near the warm-water refuges. Data sources included the West Indian Manatee One Range Map Geographical Information System (GIS) layer (Service 2022, *entire*); the WWHAP refuge classifications, attributes, and GIS location data (Valade et al. 2020, *entire*); seagrass data from 1970 to 2022 (South Florida WMD 1970, *entire*; South Florida WMD 2004, *entire*; Suwannee River WMD 2004, *entire*; South Florida WMD 2007, *entire*; St. Johns River WMD 2017, *entire*; FWC 2022, *entire*; NOAA 2022, *entire*); floating and emergent aquatic vegetation coverage from the Florida Cooperative Land Cover Map version 3.5 (FWC and Florida Natural Areas Inventory (FNAI) 2021, *entire*); salt marsh data from FWC (FWC 2015, *entire*); FWC and other sources for manatee aerial survey, telemetry, and FWC mortality data from 1984 to 2022 (FWC 1984–2022, unpublished data); and bathymetry data (General Bathymetric Chart of the Oceans (GEBCO) 2023, *entire*) and Environmental Systems Research Institute's (Esri) ArcGIS online basemap aerial imagery from 2021. For the Florida manatee, we delineated critical habitat boundaries using the following criteria:

(1) We reviewed the WWHAP (Valade et al. 2020, *entire*) to determine which

natural warm-water sites (*i.e.*, springs, passive thermal basins) have reliable (medium or high) thermal quality throughout the winter or established manatee use throughout the winter each year. All natural warm-water sites classified as primary refuges in the WWHAP meet this criterion. Some of the natural warm-water sites classified as secondary refuges also meet this criterion but others do not (*i.e.*, because they do not have medium or high thermal quality or established manatee use).

(2) We reviewed the WWHAP (Valade et al. 2020, *entire*) to determine which industrial warm-water sites (*i.e.*, power plants) contain the physical or biological feature of supporting established winter manatee aggregation areas. Areas supporting aquatic vegetation within 18.6 mi (30 km) of power plants meet this criterion only if they have established manatee use (Valade et al. 2020, pp. 25–32).

(3) We delineated all accessible waters within 18.6 mi (30 km) of the natural warm-water sites and power plants meeting criteria 1 and 2. The 18.6-mi (30-km) distance is based on the typical distance manatees travel from warm-water sites to forage in the winter (Packard 1984, *entire*; Deutsch et al. 2003b, p. 3; Deutsch et al. 2006, p. 21; Provanha et al. 2012, p. 4; Deutsch and Barlas 2016, p. 7; Haase et al. 2020, *entire*). This distance was delineated using stream or waterway miles instead of a straight-line radius from the site to represent the path manatees would travel. Waters accessible to manatees were determined when developing the West Indian Manatee One Range Map, which uses the U.S. Geological Survey's (USGS) National Hydrography Dataset, expert knowledge on access, and Florida manatee telemetry, sightings, and mortality datasets (Endries and Moskwik 2023, pers. comm.).

(4) We evaluated the 1970 to 2022 seagrass (South Florida WMD 1970, *entire*; South Florida WMD 2004, *entire*; Suwannee River WMD 2004, *entire*; South Florida WMD 2007, *entire*; St. Johns River WMD 2017, *entire*; FWC 2022, *entire*; NOAA 2022, *entire*) and aquatic vegetation, including salt marsh, coverage data (FWC 2015, *entire*; FWC and FNAI 2021, *entire*) to ensure that the areas delineated under criterion 3 have the ability to support forage material for manatees.

(5) When the critical habitat unit extended into the open waters of the Gulf of Mexico or Atlantic Ocean, we brought the offshore boundary in from the 18.6-mi (30-km) distance from the warm-water site or power plant to the 9.8-ft (3-m) bathymetry line, as Florida

manatees typically feed in waters 3.3 to 9.8 ft (1 to 3 m) in depth (Smith 1993, p. 12).

(6) In areas where the outer boundaries of the critical habitat unit were located in the middle of a bay, lagoon, river, canal, or other inland waterbody, we either extended the unit boundary beyond the 18.6-mi (30-km) distance to include the entire waterbody (if it is less than a 6-mi (10-km) extension and the area has contiguous forage or high manatee use during the winter) or brought the unit boundary in to the nearest landmark such as a bridge, lock, dam, or canal entrance.

Antillean Manatee

In general, for areas within the geographical area occupied by the Antillean manatee subspecies at the time of listing (*i.e.*, currently occupied), we delineated critical habitat boundaries under U.S. jurisdiction within accessible waters where manatees have consistently aggregated around freshwater, forage, and shelter habitat. Data sources included the West Indian Manatee One Range Map GIS layer (Service 2022, *entire*); manatee aerial survey data from 1976 to 2021 (Powell et al. 1981, *entire*; Rathbun et al. 1985, *entire*; Mignucci-Giannoni et al. 2004, *entire*; Mignucci-Giannoni 2006, *entire*; Service 1984–2011, unpublished data; Atkins Caribe, LLP 2012, 2013, 2014a, and 2014b, *entire*; Mignucci-Giannoni 2021, *entire*); freshwater, seagrass, and shelter GIS raster data and models from the "Science Summary in Support of Manatee Protection Area Design in Puerto Rico" (NOAA 2001, *entire*; USGS and U.S. Environmental Protection Agency 2005, *entire*; Drew et al. 2012, *entire*); updated seagrass coverage GIS layers (NOAA 2022, *entire*); bathymetry data (GEBCO 2023, *entire*); and Esri's ArcGIS online basemap aerial imagery from 2021. We followed the methodology used to design potential manatee protection areas (Drew et al. 2012, *entire*), but did not include the watercraft threat data and added updated seagrass data (NOAA 2022, *entire*) and manatee aerial survey data (Atkins Caribe, LLP 2012, 2013, 2014a, and 2014b, *entire*; Mignucci-Giannoni 2021, *entire*). We delineated critical habitat boundaries for the Antillean manatee using the following criteria:

(1) After calculating the geometric mean of the available or updated seagrass, freshwater, and shelter model (Drew et al. 2012, *entire*), we selected all habitat areas from this model that fell within the upper 50th percentile (the median value or higher) for seagrass, freshwater, and shelter. We then

overlapped these habitat areas with those areas that have a high frequency of observed manatees (Drew et al. 2012, p. 36).

(2) Then, we selected and added habitat areas that scored below the 50th percentile of the seagrass, freshwater, and shelter model if those areas had at least two of the three resources (seagrass, fresh water, or shelter) and also had a high frequency of observed manatees (*i.e.*, were in the upper 50th percentile for number of manatees observed) (Drew et al. 2012, p. 36).

(3) Within the areas selected in criteria 1 and 2, we delineated all accessible waters within 3 mi (5 km) of the documented freshwater sources (if present). This distance captures the local movements of most manatees during telemetry studies (Slone et al. 2006, entire). Additionally, most (86 percent) of the manatees detected during aerial surveys were within 3 mi (5 km) of a freshwater source (Powell et al. 1981, p. 642). Waters accessible to manatees were determined when developing the West Indian Manatee One Range Map, which used the USGS National Hydrography Dataset, expert knowledge on access, and Antillean manatee telemetry, sightings, and mortality datasets (Endries and Moskwik 2023, pers. comm.). If documented freshwater sources are not present within the area, we selected:

- Accessible waters within the entire bay or lagoon, or
- Waters encompassing the highest densities of manatee observations and seagrass, or
- Waters that provide shelter as described in the shelter model (Drew et al. 2012, pp. 24–25).

(4) Offshore unit boundaries were constrained to the distance or feature closest to shore of the following: approximately 820 ft (250 m) beyond the outer edge of seagrass beds (to account for mapping errors and changes in coverage overtime); 1,640 ft (500 m) from shore if no seagrass was mapped (to allow manatees access to freshwater sources or shelter along the shoreline); the 49-ft (15-m) bathymetry line (since manatees spend most of their time in waters less than 43 ft (13 m) deep, and the 49-ft (15-m) bathymetry line is the closest line to that depth); or 3 mi (5

km) from the freshwater sources (since most (86 percent) of manatees were found within 3 mi (5 km) of freshwater sources (Powell et al. 1981, p. 642) and this distance captures the local movements of most manatees during telemetry studies (Slone et al. 2006, entire)). One exception to this rule was in Vieques, where we used the 26-ft (8-m) bathymetry line along the northern shore, then switched to 820 ft (250 m) beyond the outer edge of seagrass beds on the western shore. This was because the seagrass coverage and 49-ft (15-m) bathymetry line on the northern coast are much farther offshore than where the highest densities of manatee observations occur, but the outer edge of the seagrass coverage is closer to shore on the western coast of the island (Service 2023c, p. 4).

The areas proposed as critical habitat only include waters up to the ordinary high-water line. There are no developed areas included within the proposed critical habitat boundaries except for transportation crossings, docks, or other features extending from shore over the water, which do not remove the suitability of these areas for either subspecies. When determining proposed critical habitat boundaries, we made every effort to avoid including areas of dry land such as small islands or rock outcrops. In addition, federally maintained navigational channels are excluded by text in the proposed rule and are not proposed for critical habitat designation. Federally maintained navigational channels, for the purposes of this proposed rule, are specific areas where the substrate has been persistently disturbed by planned management and maintenance dredging activities authorized by the U.S. Army Corps of Engineers at the time of critical habitat designation, and expectations are that the areas will continue to be periodically disturbed by such management activities. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such areas and these features can shift over time. Any such areas inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule

and are not proposed for designation as critical habitat. Therefore, if the critical habitat designations are finalized as proposed, a Federal action involving these areas would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

We propose to designate areas as critical habitat that we have determined were occupied at the time of listing (*i.e.*, currently occupied) and that contain one or more of the physical or biological features that are essential to the conservation of the subspecies.

Twelve units are proposed for designation based on one or more of the physical or biological features being present to support the Florida manatee's life-history processes. Thirteen units are proposed for designation based on the physical or biological feature being present to support the Antillean manatee's life-history processes. Some units contain all of the identified physical or biological features and support multiple life-history processes. Some units contain one or more of the physical or biological features necessary to support the subspecies' particular use of that habitat.

The Proposed Critical Habitat Designations Are Defined by the Maps, as Modified by Any Accompanying Regulatory Text, Presented at the End of This Document Under Proposed Regulation Promulgation

Proposed Critical Habitat Designation for the Florida Manatee

We are proposing 12 units in Florida as revised critical habitat for the Florida manatee, totaling approximately 1,904,191 ac (770,599 ha). The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the Florida manatee. All of these areas are occupied, and we are not proposing any unoccupied areas. Table 1 shows the proposed revised critical habitat units, including unit names, land ownership, and approximate area of each unit.

TABLE 1—PROPOSED CRITICAL HABITAT UNITS FOR THE FLORIDA MANATEE

[Area estimates reflect all land within critical habitat unit boundaries and do not include lands that are exempt under the Act's section 4(a)(3)(B)(i) in Units FL-04, FL-10, and FL-11.]

Critical habitat unit	Federal ownership in acres (hectares)	State ownership in acres (hectares)	Local ownership in acres (hectares)	Private ownership in acres (hectares)	Size of unit in acres (hectares)
FL-01: Wakulla Springs	936 (379)	21,598 (8,740)	1 (<1)	58 (23)	22,593 (9,143)
FL-02: Manatee and Fanning Springs	224 (91)	4,157 (1,682)	12 (5)	59 (24)	4,452 (1,802)
FL-03: Withlacoochee Bay to Anclote River	21,131 (8,551)	335,064 (135,596)	1,670 (676)	6,716 (2,719)	364,584 (147,542)

TABLE 1—PROPOSED CRITICAL HABITAT UNITS FOR THE FLORIDA MANATEE—Continued

[Area estimates reflect all land within critical habitat unit boundaries and do not include lands that are exempt under the Act's section 4(a)(3)(B)(i) in Units FL-04, FL-10, and FL-11.]

Critical habitat unit	Federal ownership in acres (hectares)	State ownership in acres (hectares)	Local ownership in acres (hectares)	Private ownership in acres (hectares)	Size of unit in acres (hectares)
FL-04: Tampa Bay	682 (276)	68,347 (27,659)	108,805 (44,032)	3,181 (1,287)	181,015 (73,254)
FL-05: Venice to Estero Bay	2,048 (829)	191,975 (77,690)	16,821 (6,807)	8,373 (3,388)	219,217 (88,714)
FL-06: Rookery Bay to Florida Bay West	343,626 (139,061)	105,559 (42,718)	18 (7)	849 (344)	450,052 (182,130)
FL-07: Upper Florida Keys	161,201 (65,236)	76,635 (31,013)	2,762 (1,118)	3,656 (1,480)	244,254 (98,846)
FL-08: Biscayne Bay to Deerfield Beach	91,404 (36,990)	46,768 (18,926)	5,525 (2,236)	3,028 (1,225)	146,725 (59,378)
FL-09: Boynton Beach to Fort Pierce	203 (82)	35,967 (14,555)	533 (216)	1,126 (456)	37,829 (15,309)
FL-10: Vero Beach to Northern Indian River Lagoon	33,077 (13,386)	117,318 (47,477)	1,782 (721)	1,410 (571)	153,588 (62,155)
FL-11: Upper St. Johns River	1,815 (735)	76,984 (31,154)	150 (61)	495 (200)	79,444 (32,150)
FL-12: Silver Springs	6 (2)	417 (169)	0 (0)	15 (6)	438 (177)
Total	656,356 (265,617)	1,080,797 (437,380)	138,080 (55,879)	28,969 (11,723)	1,904,191 (770,599)
Ownership Percentage	34	57	7	2

Note: Area sizes and percentages may not sum due to rounding.

We present brief descriptions of all proposed revised units and reasons why they meet the definition of critical habitat for the Florida manatee, below.

Unit FL-01: Wakulla Springs

Unit FL-01 consists of 22,593 ac (9,143 ha) of springs, rivers, and open water along the Gulf of Mexico in Wakulla County, Florida. The unit extends from Wakulla Springs in Edward Ball Wakulla Springs State Park down the Wakulla River out to the Gulf of Mexico where it fans out to approximately 5 mi (8 km) east and west. The unit also extends up the St. Marks River approximately 9 river mi (14.5 km) from the confluence of the Wakulla and St. Marks Rivers. The unit includes all inshore, manatee-accessible waters below the mean high water (MHW) line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water site of Wakulla Springs. Offshore, the unit extends to either 18.6 mi (30 km) from Wakulla Springs or the outer extent of seagrass beds in the Gulf of Mexico, whichever is closest to shore.

Areas within this unit include approximately 936 ac (379 ha; 4 percent) in Federal ownership, 21,598 ac (8,740 ha; 96 percent) in State ownership, 1 ac (less than 1 ha; less than 1 percent) in local government ownership, and 58 ac (23 ha; less than 1 percent) in private/other ownership. Federally owned lands in this unit include St. Marks National Wildlife Refuge (NWR), and State-owned lands include Edward Ball Wakulla Springs and San Marcos de Apalache Historic State Parks, as well as State-owned submerged lands. General land use within this unit includes parks, natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming,

fishing, and boating). Small areas of the unit also adjoin areas of residential and commercial development.

Unit FL-01 is occupied by the subspecies and contains all of the physical or biological features essential to the conservation of the subspecies. This unit has one primary warm-water refuge, Wakulla Springs, that supports established manatee use and has medium thermal quality (Valade et al. 2020, p. 29). The unit also provides forage material within the Wakulla and St. Marks Rivers, as well as in the Gulf of Mexico. In addition, this unit provides the northernmost and westernmost primary warm-water refuge in the Florida manatee's range, thereby supporting expansion and refuge for manatees from other units or a stopover location for manatees migrating back to Florida for the winter, ensuring good spatial representation for the Northwest Manatee Management Unit.

Approximately 18,940 ac (7,665 ha; 84 percent) of the unit overlap with proposed critical habitat for the threatened rufa red knot (*Calidris canutus rufa*) (see 88 FR 22530, April 13, 2023) and the North Atlantic distinct population segment (DPS) of the green sea turtle (*Chelonia mydas*) (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL-01 include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; conducting spring run restoration and

improving access; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL-02: Manatee and Fanning Springs

Unit FL-02 consists of 4,452 ac (1,802 ha) of springs and river in the Big Bend of the Gulf Coast in Dixie, Levy, and Gilchrist Counties, Florida. The unit extends from approximately 18.6 mi (30 km) north of Fanning Springs near Log Landing Conservation Area downstream to the mouth of the Suwannee River at the Gulf of Mexico. The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water sites of Fanning and Manatee Springs.

Areas within this unit include approximately 224 ac (91 ha; 5 percent) in Federal ownership, 4,157 ac (1,682 ha; 93 percent) in State ownership, 12 ac (5 ha; less than 1 percent) in local government ownership, and 59 ac (24 ha; 1 percent) in private/other ownership. Federally owned lands in this unit include Lower Suwannee NWR, and State-owned lands include Manatee Springs and Fanning Springs State Parks, Suwannee River WMD conservation areas, and State-owned submerged lands. General land use within this unit includes parks, natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, and boating). Small areas of the

unit also adjoin areas of residential and commercial development.

Unit FL-02 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit has two secondary warm-water refuges, Manatee Springs and Fanning Springs, that support established manatee use with high and medium thermal quality, respectively (Valade et al. 2020, p. 28). This unit also provides forage material within the Suwannee River. In addition, this unit provides the two northernmost secondary warm-water refuges on the west coast of Florida, thereby supporting refuge and an area for expansion for manatees from other units or a stopover location for manatees migrating back to Florida for the winter, ensuring good spatial representation for the Northwest Manatee Management Unit.

Approximately 4,045 ac (1,637 ha; 91 percent) of the unit overlap with designated critical habitat for the threatened Atlantic sturgeon (Gulf subspecies) (*Acipenser oxyrinchus desotoi*) (see 68 FR 13370, March 19, 2003) and Suwannee moccasinshell (*Medionidus walker*) (see 86 FR 34979, July 1, 2021) and proposed critical habitat for the threatened North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL-02 include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; conducting spring run restoration and improving access; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL-03: Withlacoochee Bay to Anclote River

Unit FL-03 consists of 364,584 ac (147,542 ha) of springs, rivers, and open water along the Gulf of Mexico in Levy,

Citrus, Hernando, Pasco, and Pinellas Counties, Florida. The unit extends from approximately 6 mi (9.7 km) north of the mouth of the Withlacoochee River to Howard Beach Park, which is approximately 1.5 mi (2.4 km) south of the mouth of the Anclote River. The unit includes all inshore, manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water sites of the Crystal River Springs Complex, Homosassa Springs, the Chassahowitzka Springs Group, the Weeki Wachee Spring Complex, and Cow Creek Spring. Offshore, the unit extends to either 18.6 mi (30 km) from the warm-water sites or the outer extent of seagrass beds in the Gulf of Mexico, whichever is closest to shore.

Areas within this unit include approximately 21,131 ac (8,551 ha; 6 percent) in Federal ownership, 335,064 ac (135,596 ha; 92 percent) in State ownership, 1,670 ac (676 ha; less than 1 percent) in local government ownership, and 6,716 ac (2,719 ha; 2 percent) in private/other ownership. Federally owned lands in this unit include Crystal River and Chassahowitzka NWRs; State-owned lands include Anclote Key Preserve State Park, Marjorie Harris Carr Cross Florida Greenway State Recreation and Conservation Area, Withlacoochee State Forest, and State-owned submerged lands; and local government-owned lands include several county-owned parks and preserves. General land use within this unit includes parks, natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, and boating), and power generation. Some areas of the unit also adjoin areas of residential and commercial development.

Unit FL-03 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit has three primary warm-water refuges, the Crystal River Springs Complex, Homosassa Springs, and the Weeki Wachee Spring Complex, that support established manatee use and have high thermal quality and two secondary refuges, the Chassahowitzka Springs Group and Cow Creek Spring, that have unpredictable manatee use with medium thermal quality (Valade et al. 2020, pp. 28–29). This unit also provides forage material within the Withlacoochee, Crystal, Homosassa, Chassahowitzka, Weeki Wachee, Pithlachascotee and Anclote Rivers and tributaries, as well as in the Gulf of Mexico. In addition, this unit supports an important wintering area (Crystal

River Springs Complex) for many of the manatees that travel west of Florida during the warmer months, ensuring good representation within the Northwest Manatee Management Unit and a connection to the Southwest Manatee Management Unit through its extension to the Anclote River.

Approximately 326,379 ac (132,081 ha; 90 percent) of the unit overlap with the current critical habitat designation for the West Indian manatee (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977) and proposed critical habitat for the threatened North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL-03 include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; removing nutrient-laden sediments; coordinating with the Service prior to treatments of invasive or nuisance aquatic vegetation and limiting invasive or nuisance aquatic vegetation treatments that could reduce vegetation availability during the cold season; conducting spring run restoration and improving access; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL-04: Tampa Bay

Unit FL-04 consists of 181,015 ac (73,254 ha) of Tampa Bay and the springs, rivers, and canals surrounding the bay in Pinellas, Hillsborough, and Manatee Counties, Florida. The unit includes all inshore waters of Tampa Bay east of the Skyway Bridge on Interstate 275 and inshore waters from Fort De Soto Park to the Pinellas Bayway (State Road 682). The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the established winter manatee aggregation areas near Duke

Energy's Bartow Power Plant, Tampa Electric Company's Bayside Power Plant, and Tampa Electric Company's Big Bend Station.

Areas within this unit include approximately 682 ac (276 ha; less than 1 percent) in Federal ownership, 68,347 ac (27,659 ha; 38 percent) in State ownership, 108,805 ac (44,032 ha; 60 percent) in local government ownership, and 3,181 ac (1,287 ha; 2 percent) in private/other ownership.

Under section 4(a)(3)(B)(i) of the Act, we are exempting 4,415 ac (1,787 ha) of MacDill Air Force Base lands within this unit from the critical habitat designation because the U.S. Department of Defense (DoD) has an approved integrated natural resources management plan (INRMP) for this area that provides benefits to the manatee and its habitat (see Exemptions, below).

Federally owned lands in this unit include Pinellas NWR. State-owned lands in this unit include State Parks (Cockroach Bay Preserve, Terra Ceia Preserve, Little Manatee River, and Skyway Fishing Pier), Southwest Florida WMD restoration areas, and State-owned submerged lands. Local government-owned lands in this unit include several county-owned parks and preserves. General land use within this unit includes parks, natural resource conservation, wildlife management, recreational and commercial activities (e.g., swimming, fishing, and boating), power generation, military activities, and cargo and cruise port activities. Most of the unit also adjoins areas of residential and commercial development.

Unit FL-04 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit provides forage material within 18.6 mi (30 km) of three established winter manatee aggregation areas: Duke Energy's Bartow Power Plant, Tampa Electric Company's Bayside Power Plant, and Tampa Electric Company's Big Bend Station (Valade et al. 2020, pp. 29–30). In addition, this unit supports expansion and recovery of the regional warm-water network in the Southwest Manatee Management Unit due to several lower quality springs and other natural refuges or areas available to create new refuges within the unit.

Approximately 168,976 ac (68,382 ha; 93 percent) of the unit overlap with the current critical habitat designation for the West Indian manatee (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977); designated critical habitat for the wintering population of the endangered piping

plover (*Charadrius melodus*) (see 66 FR 36038, July 10, 2001); and proposed critical habitat for the threatened rufous red knot (see 88 FR 22530, April 13, 2023) and the North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL-04 include foraging and other habitat loss, modification, and degradation; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation, living shorelines, and filter feeders; removing nutrient-laden sediments; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL-05: Venice to Estero Bay

Unit FL-05 consists of 219,217 ac (88,714 ha) of Charlotte Harbor, Gasparilla Sound, Matlacha Pass, and Estero Bay, as well as the rivers, canals, and springs surrounding them, in Sarasota, Charlotte, Lee, Hendry, and Collier Counties, Florida. The unit includes inshore waters from the Boca Grande Causeway south to Vanderbilt Beach Road. From Charlotte Harbor, the unit extends up the Myakka River, then down Curry Creek to the Venice Inlet. The unit does not include the Peace River east of the Barron Collier Bridge on State Road 41. The Caloosahatchee River is included from its mouth near Cape Coral to near the Caloosahatchee and C-43 Basin Storage Reservoir. The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water sites of Warm Mineral Springs, Matlacha Isles, North Cape Coral Canal, and Ten Mile Canal Borrow Pit; and the established winter manatee aggregation area near Florida Power and Light's Fort Myers Power Plant.

Areas within this unit include approximately 2,048 ac (829 ha; 1 percent) in Federal ownership, 191,975 ac (77,690 ha; 88 percent) in State ownership, 16,821 ac (6,807 ha; 8 percent) in local government ownership, and 8,373 ac (3,388 ha; 4 percent) in private/other ownership. Federally

owned lands in this unit include Caloosahatchee, Matlacha Pass, Pine Island, Island Bay, and J.N. Ding Darling NWRs. State-owned lands in this unit include State Parks (Lovers Key, Charlotte Harbor Preserve, Estero Bay Preserve, Delnor-Wiggins Pass, and Cayo Costa), Myakka State Forest, Southwest Florida WMD's Deer Prairie Creek Preserve, South Florida WMD's C-43 Basin Storage Reservoir, and State-owned submerged lands. In this unit, local government-owned lands include several county-owned parks and preserves, and privately-owned preserves include the Calusa Land Trust and Nature Preserve of Pine Island and Sanibel-Captiva Conservation Foundation conservation lands. General land use within this unit includes parks, natural resource conservation, wildlife management, recreational and commercial activities (e.g., swimming, fishing, and boating), and power generation. Some areas of the unit also adjoin areas of residential and commercial development.

Unit FL-05 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit has one primary warm-water refuge, Warm Mineral Spring Creek/Salt Creek, that supports established manatee use and has high thermal quality and three secondary refuges, Matlacha Isles, North Cape Coral Canals (Ceitus Lake), and Ten Mile Canal-Borrow Pit, that have established manatee use with medium or low thermal quality (Valade et al. 2020, p. 30). In addition, this unit provides forage material within 18.6 mi (30 km) of the established winter manatee aggregation area near Florida Power and Light's Fort Myers Power Plant within the Caloosahatchee River (Valade et al. 2020, p. 30), as well as within Roberts Bay, Curry Creek, Myakka River, Charlotte Harbor, Gasparilla Sound, Matlacha Pass, and Estero Bay. This unit also supports expansion and recovery of the regional warm-water network in the Southwest Manatee Management Unit due to several lower quality springs and other natural refuges or areas available to create new refuges within the unit.

Approximately 215,477 ac (87,201 ha; 98 percent) of the unit overlap with the current critical habitat designation for the West Indian manatee (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977); designated critical habitat for the wintering population of the endangered piping plover (see 66 FR 36038, July 10, 2001), U.S. DPS of the smalltooth sawfish (*Pristis pectinata*) (see 74 FR 45353,

September 2, 2009), and Northwest Atlantic Ocean DPS of the loggerhead sea turtle (*Caretta caretta*) (see 79 FR 39856, July 10, 2014); and proposed critical habitat for the threatened rufa red knot (see 88 FR 22530, April 13, 2023) and the North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL–05 include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; removing nutrient-laden sediments; conducting spring run restoration and improving access; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL–06: Rookery Bay to Florida Bay West

Unit FL–06 consists of 450,052 ac (182,130 ha) of inshore and coastal waters from Naples Bay to the western half of Florida Bay in Collier, Monroe, and Miami-Dade Counties, Florida. The unit includes inshore waters of Naples from the Golden Gate Parkway (County Road 886) bridge over Gordon River to Marco Island. From Ten Thousand Island to Florida Bay, the unit includes inshore waters and offshore waters ranging from 1 to 13 mi (1.6 to 21 km) offshore. The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water sites of Henderson Creek, Marco Island Canals, Port of the Islands Canals, Port of the Islands Mitigation Site, Wooten's Pond, Big Cypress Preserve Canal, Mud Bay, and the Everglades Complex.

Areas within this unit include approximately 343,626 ac (139,061 ha; 76 percent) in Federal ownership, 105,559 ac (42,718 ha; 23 percent) in State ownership, 18 ac (7 ha; less than 1 percent) in local government ownership, and 849 ac (344 ha; less than

1 percent) in private/other ownership. Federally owned lands in this unit include Ten Thousand Island NWR, Everglades National Park, and Big Cypress National Preserve; State-owned lands include Collier-Seminole and Fakahatchee Strand Preserve State Parks, Rookery Bay National Estuarine Research Reserve (NERR), and State-owned submerged lands. General land use within this unit includes parks, natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, and boating). Small areas of the unit also adjoin areas of residential and commercial development.

Unit FL–06 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit has two primary warm-water refuges, Port of the Islands Canals and Port of the Islands Mitigation Site, that have medium thermal quality with established manatee use (canals) and unpredictable manatee use (mitigation site) and six secondary refuges, Henderson Creek, Marco Island Canals, Wooten's Pond, Big Cypress Preserve Canal, Mud Bay, and the Everglades Complex, that have established manatee use with medium, low, or unknown thermal quality (Valade et al. 2020, pp. 29–30). In addition, this unit provides forage material within Naples Bay, Rookery Bay, Gullivan Bay, Florida Bay, the Gulf of Mexico, and the many small bays and creeks along the coast.

This unit provides a connection between the Southwest and Atlantic Coast Manatee Management Units as it extends into both units, thereby supporting expansion and movements between the Gulf and Atlantic Coasts. Additionally, this unit supports the largest and most stable foraging area within the Atlantic Coast Manatee Management Unit, Florida Bay (Yarbro and Carlson 2016, entire).

Approximately 448,908 ac (181,667 ha; 100 percent) of the unit overlap with the current critical habitat designation for the West Indian manatee (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977); designated critical habitat for the threatened Florida DPS of the American crocodile (*Crocodylus acutus*) (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977), and for the endangered Everglade snail kite (*Rostrhamus sociabilis plumbeus*) (see 42 FR 40685, August 11, 1977), wintering population of the piping plover (see 66 FR 36038, July 10, 2001), U.S. DPS of the smalltooth sawfish (*Pristis pectinata*) (see 74 FR 45353,

September 2, 2009), and Northwest Atlantic Ocean DPS of the loggerhead sea turtle (see 79 FR 39856, July 10, 2014); and proposed critical habitat for the threatened rufa red knot (see 88 FR 22530, April 13, 2023) and the North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL–06 include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; removing nutrient-laden sediments; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL–07: Upper Florida Keys

Unit FL–07 consists of 244,254 ac (98,846 ha) of inshore and coastal waters of the Upper Florida Keys, from Islamorada north to Old Rhodes Key in Monroe and Miami-Dade Counties, Florida. The unit includes waters of Eastern Florida Bay to approximately 13 mi (21 km) offshore, inshore waters and canals of the Keys, and waters of the Atlantic Ocean approximately 0.5 to 1.5 mi (0.8 to 2.4 km) offshore. The unit also extends inland into the Glades Canal approximately 11 mi (17.7 km) and into the Florida Power and Light Everglades Mitigation Bank Canals approximately 7 mi (11 km). The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water sites of the Upper Keys Canals and Brown Street Canal.

Areas within this unit include approximately 161,201 ac (65,236 ha; 66 percent) in Federal ownership, 76,635 ac (31,013 ha; 31 percent) in State ownership, 2,762 ac (1,118 ha; 1 percent) in local government ownership, and 3,656 ac (1,480 ha; 1 percent) in private/other ownership. Federally owned lands in this unit include Crocodile Lake NWR, Everglades

National Park, and Biscayne National Park. State-owned lands in this unit include Lignumvitae Key Botanical, John Pennnekamp Coral Reef, Windley Key Fossil Reef Geological, and Dagny Johnson Key Largo Hammock Botanical State Parks; South Florida WMD's Model Lands Basin; Florida Keys Wildlife and Environmental Area; and State-owned submerged lands. General land use within this unit includes parks, natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, and boating). Some areas of the unit also adjoin areas of residential and commercial development.

Unit FL-07 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit has two secondary warm-water refuges, Brown Street Canal and the Upper Keys Canals, that have established manatee use with medium and unknown thermal quality, respectively (Valade et al. 2020, pp. 26–27). In addition, this unit provides forage material within Florida Bay, the Atlantic Ocean, Card Sound, Barnes Sound, Manatee Bay, Blackwater Sound, Buttonwood Sound, and the many smaller bays, sounds, and basins of the Upper Florida Keys and the southeastern coast of Florida's mainland. This unit supports the largest and most stable foraging areas within the Atlantic Coast Manatee Management Unit, Florida Bay, and the Florida Keys (Yarbro and Carlson 2016, entire), contributing to the resiliency of the unit.

Approximately 244,247 ac (98,843 ha; 100 percent) of the unit overlap with the current critical habitat designation for the West Indian manatee (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977); designated critical habitat for the endangered U.S. DPS of the smalltooth sawfish (see 74 FR 45353, September 2, 2009), threatened Florida DPS of the American crocodile (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977), elkhorn (*Acropora palmata*) and staghorn (*A. cervicornis*) corals (see 73 FR 72210, November 26, 2008), Nassau grouper (*Epinephelus striatus*) (see 89 FR 126, January 2, 2024), and five threatened Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024); and proposed critical habitat for the threatened North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL-07

include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL-08: Biscayne Bay to Deerfield Beach

Unit FL-08 consists of 146,725 ac (59,378 ha) of inshore waters from Biscayne Bay to Deerfield Beach in Miami-Dade, Broward, and Palm Beach Counties, Florida. The unit includes inshore waters of Biscayne Bay and the intracoastal waterways, rivers, and canals (up to 24 mi (38.6 km) inland in some locations) along the southeastern Florida coast from the southern end of Biscayne National Park to Deerfield Beach. The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water sites of the Coral Gables Waterway, Palmer Lake, and the Little River–S-27 structure; and the established winter manatee aggregation areas near Florida Power and Light's Dania Beach and Port Everglades Energy Centers.

Areas within this unit include approximately 91,404 ac (36,990 ha; 62 percent) in Federal ownership, 46,768 ac (18,926 ha; 32 percent) in State ownership, 5,525 ac (2,236 ha; 4 percent) in local government ownership, and 3,028 ac (1,225 ha; 2 percent) in private/other ownership. Federally owned lands in this unit include Biscayne National Park. State-owned lands in this unit include State Parks (Oleta River, Bill Baggs Cape Florida, and Dr. Von D. Mizell-Eula Johnson), South Florida WMD's Biscayne Coastal Wetlands, Everglades and Francis S. Taylor Wildlife Management Area, and State-owned submerged lands. Local government-owned lands in this unit include several county-owned parks and preserves. General land use within this

unit includes parks, natural resource conservation, wildlife management, recreational and commercial activities (e.g., swimming, fishing, and boating), power generation, and cargo and cruise port activities. Most of the unit also adjoins areas of residential and commercial development.

Unit FL-08 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit has one primary warm-water refuge, the Coral Gables Waterway, with established manatee use and high thermal quality and two secondary warm-water refuges: Palmer Lake, with unpredictable manatee use and medium thermal quality; and Little River–S-27 structure, with established manatee use and low thermal quality (Valade et al. 2020, pp. 26–27). In addition, this unit provides forage material within 18.6 mi (30 km) of the established winter manatee aggregation area near Florida Power and Light's Dania Beach and Port Everglades Energy Centers (Valade et al. 2020, p. 30), as well as within Biscayne Bay, the Miami River, Little River, Intracoastal Waterway, Stranahan River, New River, Middle River, and the many canals, lakes, and bays along the southeast coast of Florida. This unit also supports expansion and recovery of the regional warm-water network in the Atlantic Coast Manatee Management Unit due to several lower quality natural refuges or areas available to create new refuges within the unit.

Approximately 139,942 ac (56,632 ha; 95 percent) of the unit overlap with the current critical habitat designation for the West Indian manatee (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977); designated critical habitat for the endangered Everglade snail kite (see 42 FR 40685, August 11, 1977) and Florida bonneted bat (*Eumops floridanus*) (see 89 FR 16624, March 7, 2024); designated critical habitat for the threatened Florida DPS of the American crocodile (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977), elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), Nassau grouper (see 89 FR 126, January 2, 2024), and five threatened Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024); and proposed critical habitat for the threatened North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL-08

include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; removing nutrient-laden sediments; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL-09: Boynton Beach to Fort Pierce

Unit FL-09 consists of 37,829 ac (15,309 ha) of inshore waters from approximately 1.3 mi (2 km) south of the Boynton Inlet to approximately 4.7 mi (7.6 km) south of the Fort Pierce Inlet in Palm Beach, Martin, and St. Lucie Counties, Florida. The unit includes inshore waters (up to 18 mi (29 km) inland) of the intracoastal waterways, rivers, and canals along the eastern Florida coast even with Lake Okeechobee. The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water site of Willoughby Creek and the established winter manatee aggregation area near Florida Power and Light's Riviera Beach Energy Center.

Areas within this unit include approximately 203 ac (82 ha; 1 percent) in Federal ownership, 35,967 ac (14,555 ha; 95 percent) in State ownership, 533 ac (216 ha; 1 percent) in local government ownership, and 1,126 ac (456 ha; 3 percent) in private/other ownership. The majority of this unit consists of State-owned submerged lands. General land use within this unit includes parks, natural resource conservation, wildlife management, recreational and commercial activities (e.g., swimming, fishing, and boating), power generation, and cargo and cruise port activities. Most of the unit also adjoins areas of residential and commercial development.

Unit FL-09 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the

subspecies. This unit has one secondary warm-water refuge, Willoughby Creek, with established manatee use and low thermal quality (Valade et al. 2020, p. 27). In addition, this unit provides forage material within 18.6 mi (30 km) of the established winter manatee aggregation area near Florida Power and Light's Riviera Beach Energy Center (Valade et al. 2020, p. 26), as well as within Lake Worth Lagoon, the North Palm Beach Waterway, Loxahatchee River, Indian River Lagoon, St. Lucie River, and the many canals and basins connected to them. This unit also supports expansion and recovery of the regional warm-water network in the Atlantic Coast Manatee Management Unit due to several lower quality natural refuges or areas available to create new refuges within the unit.

Approximately 32,389 ac (13,107 ha; 86 percent) of the unit overlap with the current critical habitat designation for the West Indian manatee (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977); designated critical habitat for the endangered wintering population of the piping plover (see 66 FR 36038, July 10, 2001) and Northwest Atlantic Ocean DPS of the loggerhead sea turtle (see 79 FR 39856, July 10, 2014); and proposed critical habitat for the threatened North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL-09 include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; removing nutrient-laden sediments; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL-10: Vero Beach to Northern Indian River Lagoon

Unit FL-10 consists of 153,588 ac (62,155 ha) of inshore waters from the Merrill P. Barber Bridge (on State Road

60) in Vero Beach to the northern tip of the Indian River Lagoon in Indian River, Brevard, and Volusia Counties, Florida. The unit includes rivers and canals along the Indian River Lagoon and Banana River on the central east coast of Florida. The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water sites of the Sebastian River (C-54 Canal), DeSoto Canal, Berkeley Canal, and the Banana River Marine Service Marina, as well as the established winter manatee aggregation area near Florida Power and Light's Port Canaveral Energy Center. The unit does not extend all the way through the Haulover Canal or include Mosquito Lagoon because those areas are farther than 18.6 mi (30 km) from the nearest primary or secondary warm-water refuge or established winter manatee aggregation area.

Areas within this unit include approximately 33,077 ac (13,386 ha; 22 percent) in Federal ownership, 117,318 ac (47,477 ha; 76 percent) in State ownership, 1,782 ac (721 ha; 1 percent) in local government ownership, and 1,410 ac (571 ha; 1 percent) in private/other ownership. Under section 4(a)(3)(B)(i) of the Act, we are exempting 278 ac (112 ha) of DoD lands (216 ac (87 ha) of Cape Canaveral Space Force Station lands and 62 ac (25 ha) of Patrick Space Force Base lands) within this unit from the critical habitat designation because the DoD has an approved INRMP for these areas that provides benefits to the manatee and its habitat (see Exemptions, below).

Federally owned lands in this unit include Merritt Island, Pelican Island, and Archie Carr NWRs. State-owned lands in this unit include State Parks (Indian River Lagoon Preserve, St. Sebastian River Preserve, and Sebastian Inlet) and State-owned submerged lands. Local government-owned lands in this unit include several county- and city-owned parks and preserves. General land use within this unit includes parks, natural resource conservation, wildlife management, recreational and commercial activities (e.g., swimming, fishing, and boating), power generation, military activities, cargo and cruise port activities, and space research and launch activities. Most of the unit also adjoins areas of residential and commercial development.

Unit FL-10 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit has one primary warm-water refuge, DeSoto Canal, with established manatee use and medium

thermal quality, and three secondary warm-water refuges, Sebastian River (C-54 Canal), Berkely Canal, and Banana River Marine Service Marina, with established manatee use and low to medium thermal quality (Valade et al. 2020, pp. 25–27). In addition, this unit provides forage material within 18.6 mi (30 km) of the established winter manatee aggregation area near Florida Power and Light's Cape Canaveral Energy Center (Valade et al. 2020, p. 26), as well as within the Indian River Lagoon, St. Sebastian River, Turkey Creek, Crane Creek, Eau Gallie River, Sykes Creek, Banana River, and the many canals connected to them. This unit also supports expansion and recovery of the regional warm-water network in the Atlantic Coast Manatee Management Unit due to several lower quality natural refuges or areas available to create new refuges within the unit.

Approximately 151,293 ac (61,226 ha; 99 percent) of the unit overlap with the current critical habitat designation for the West Indian manatee (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977) and proposed critical habitat for the threatened rufa red knot (see 88 FR 22530, April 13, 2023) and the North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological features identified within Unit FL–10 include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; removing nutrient-laden sediments; enhancing existing or creating alternate warm-water refuges; establishing and enforce boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL–11: Upper St. Johns River

Unit FL–11 consists of 79,444 ac (32,150 ha) of springs, rivers, and lakes in the Upper St. Johns, Hontoon Dead, Ziegler Dead, Norris Dead, and Ocklawaha Rivers in Lake, Seminole, Volusia, Marion, and Putnam Counties,

Florida. The unit extends from Lake Monroe north to Memorial Bridge (State Road 100) over the St. Johns River, east to the mouth of Dunns Creek at Crescent Lake, and west to the Rodman Reservoir through the Cross Florida Barge Canal. The unit also includes the section of the Ocklawaha River from the St. Johns River to the Rodman Dam. The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water sites of Blue, Silver Glen, Salt, and Welaka Springs.

Areas within this unit include approximately 1,815 ac (735 ha; 2 percent) in Federal ownership, 76,984 ac (31,154 ha; 97 percent) in State ownership, 150 ac (61 ha; less than 1 percent) in local government ownership, and 495 ac (200 ha; 1 percent) in private/other ownership. Under section 4(a)(3)(B)(i) of the Act, we are exempting 8 ac (3.2 ha) of Rodman Bomb Target, part of the Naval Air Station Jacksonville Complex, within this unit from the critical habitat designation because the DoD has an approved INRMP for these areas that provides benefits to the manatee and its habitat (see Exemptions, below).

Federally owned lands in this unit include Lake Woodruff NWR and Ocala National Forest. State-owned lands in this unit include State Parks (DeLeon Springs, Blue Spring, Hontoon Island, Ravine Gardens, Lower Wekiva River Preserve and Dunns Creek), Marjorie Harris Carr Cross Florida Greenway State Recreation and Conservation Area, Welaka State Forest, Lake George State Forest, and State-owned submerged lands. Local government-owned lands in this unit include several county-owned parks and preserves. General land use within this unit includes parks, natural resource conservation, wildlife management, recreational and commercial activities (e.g., swimming, fishing, and boating), and military activities. Some areas of the unit also adjoin areas of residential and commercial development.

Unit FL–11 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit has three primary warm-water refuges, Blue Springs, Silver Glen Springs, and Salt Springs, with established manatee use and high thermal quality and one secondary warm-water refuge, Welaka Springs, with established manatee use and low thermal quality (Valade et al. 2020, p. 25). In addition, this unit provides forage material within the main stems and tributaries of the St. Johns, Hontoon

Dead, Ziegler Dead, Norris Dead, and Ocklawaha Rivers, as well as within Lake Monroe, Lake Beresford, Lake Woodruff, Spring Garden Lake, Lake Dexter, Lake George, the Rodman Reservoir, and the many smaller lakes, rivers, and creeks connecting them. This unit also provides some of the farthest inland primary warm-water refuges in the Florida manatee's range and supports expansion and recovery of the regional warm-water network in the Upper St. Johns River Manatee Management Unit due to several lower quality natural refuges or areas available to create new refuges within the unit, thereby supporting expansion and refuge for manatees, and ensuring good spatial representation for the St. Johns River Manatee Management Unit.

Approximately 65,961 ac (26,693 ha; 83 percent) of the unit overlap with the current critical habitat designation for the West Indian manatee (see 41 FR 41914, September 24, 1976, and 42 FR 47840, September 22, 1977).

Threats to the physical or biological features identified within Unit FL–11 include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; removing nutrient-laden sediments; coordinating with the Service prior to treatments of invasive or nuisance aquatic vegetation and limiting invasive or nuisance aquatic vegetation treatments that could reduce vegetation availability during the cold season; conducting spring run restoration and improving access; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit FL–12: Silver Springs

Unit FL–12 consists of 438 ac (177 ha) of springs and rivers in Marion County, Florida. The unit extends from Silver Springs down Silver River, then north and south into the Ocklawaha River approximately 13 mi (21 km) to Cedar Creek to the north and Southeast

Highway 464C to the south. The unit includes manatee-accessible waters below the MHW line (Service 2022, entire) within approximately 18.6 mi (30 km) from the warm-water site of Silver Springs.

Areas within this unit include approximately 6 ac (2 ha; 1 percent) in Federal ownership, 417 ac (169 ha; 95 percent) in State ownership, and 15 ac (6 ha; 3 percent) in private/other ownership.

Federally owned lands in this unit include the Ocala National Forest, and State-owned lands in this unit include Silver Springs State Park, Marjorie Harris Carr Cross Florida Greenway State Recreation and Conservation Area, St. Johns River WMD's Ocklawaha Prairie Restoration Area, and State-owned submerged lands. General land use within this unit includes parks, natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, and boating). Small areas of the unit also adjoin areas of residential and commercial development.

Unit FL-12 is occupied by the subspecies and contains one or more of the physical or biological features essential to the conservation of the subspecies. This unit has one primary warm-water refuge, Silver Springs, with high thermal quality and unpredictable manatee use (Valade et al. 2020, p. 25),

although recent studies have documented increased and consistent use of the spring and nearby waters (Ross et al. 2023, p. 2). In addition, this unit provides forage material within the Silver and Ocklawaha Rivers. This unit also provides the farthest inland primary warm-water refuge in the Florida manatee's range and supports expansion and recovery of the regional warm-water network in the Upper St. Johns River Manatee Management Unit due to several lower quality natural refuges or areas available to create new refuges within the unit, thereby supporting expansion and refuge for manatees, and ensuring good spatial representation for the St. Johns River Manatee Management Unit.

Threats to the physical or biological features identified within Unit FL-12 include foraging and other habitat loss, modification, and degradation; warm-water habitat loss; algal blooms; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; establishing and maintaining minimum flows and levels; restoring aquatic vegetation, living shorelines, and filter feeders; coordinating with the Service prior to treatments of invasive or nuisance aquatic vegetation and limiting invasive

or nuisance aquatic vegetation treatments that could reduce vegetation availability during the cold season; conducting spring run restoration and improving access; enhancing existing or creating alternate warm-water refuges; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conditions for in-water construction; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Proposed Critical Habitat Designation for the Antillean Manatee

We are proposing 13 units in the Commonwealth of Puerto Rico as critical habitat for the Antillean manatee, totaling approximately 78,121 ac (31,614 ha). The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the Antillean manatee. All of these areas are occupied, and we are not proposing any unoccupied areas. All of these areas are also Commonwealth-owned. Table 2 shows the proposed critical habitat units, including unit names, land ownership, and approximate area of each unit.

TABLE 2—PROPOSED CRITICAL HABITAT UNITS FOR THE ANTILLEAN MANATEE

[Area estimates reflect all land within critical habitat unit boundaries.]

Critical habitat unit	Commonwealth ownership in acres (hectares)	Size of unit in acres (hectares)
PR-01: Boca Vieja	2,640 (1,068)	2,640 (1,068)
PR-02: Condado Lagoon	91 (37)	91 (37)
PR-03: Río Grande	1,691 (685)	1,691 (685)
PR-04: Fajardo	2,065 (836)	2,065 (836)
PR-05: Ceiba	6,429 (2,602)	6,429 (2,602)
PR-06: Vieques	4,980 (2,015)	4,980 (2,015)
PR-07: Arroyo	15,001 (6,071)	15,001 (6,071)
PR-08: Santa Isabel to Jobos Bay	24,360 (9,858)	24,360 (9,858)
PR-09: Guayanilla	7,404 (2,996)	7,404 (2,996)
PR-10: Guánica	1,798 (728)	1,798 (728)
PR-11: Bahía Sucia	1,732 (697)	1,732 (697)
PR-12: Boquerón	1,989 (805)	1,989 (805)
PR-13: Mayagüez	7,949 (3,217)	7,949 (3,217)
Total	78,121 (31,614)	78,121 (31,614)
Ownership Percentage	100

Note: Area sizes and percentages may not sum due to rounding.

We present brief descriptions of all proposed units and reasons why they meet the definition of critical habitat for the Antillean manatee, below.

Unit PR-01: Boca Vieja

Unit PR-01 consists of 2,640 ac (1,068 ha) of marine waters below the MHW line within the Ensenada Boca Vieja along the coastline of the Municipality of Toa Baja, Puerto Rico. The unit extends from the northernmost point of

Isla de Cabra on the east and approximately 3 mi (5 km) across towards Punta Salinas to the west. The entire unit is within Commonwealth ownership. General land use within this unit includes natural resource conservation, wildlife management, and

recreational and commercial activities (e.g., swimming, fishing, boating). Small areas of this unit also adjoin areas of residential and commercial development.

Unit PR-01 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-01 is one of the three units on the north coast, ensuring good spatial representation of critical habitat on the north coast of Puerto Rico. Approximately 2,631 ac (1,065 ha; 99.7 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008) and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024); and proposed critical habitat for the threatened North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological feature identified within Unit PR-01 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris removal guidance with manatee and aquatic vegetation considerations.

Unit PR-02: Condado Lagoon

Unit PR-02 consists of 91 ac (37 ha) of marine waters below the MHW line within the Condado Lagoon and El Boquerón along the coastline of the Municipality of San Juan, Puerto Rico. The Condado Lagoon is bounded by the Condado Peninsula to the north, the Baldorioty de Castro Expressway to the south, and the San Antonio and the Dos Hermanos bridges on the west and northwest respectively. This unit also includes the marine waters of El Boquerón that connect with the Condado Lagoon and are geographically separated by the Dos Hermanos Bridge. This unit extends from the Condado

Lagoon to El Boquerón along the eastern coastline towards Playita del Condado, and approximately 705 ft (215 m) across towards the San Jerónimo del Boquerón Fort to the west. The entire unit is within Commonwealth ownership and overlaps with the Condado Lagoon Nature Reserve, co-managed between the PRDNER and the San Juan Bay National Estuary Program through its management plan (PRDNER 2016, entire). General land use within this unit includes natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, kayaking, paddleboarding). Small areas of this unit also adjoin areas of residential and commercial development.

Unit PR-02 is occupied by the subspecies and provides at least two of the three resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: seagrass in shallow water and calm waters for shelter. Unit PR-02 is one of the three units on the north coast, ensuring good spatial representation of critical habitat on the north coast of Puerto Rico. Approximately 88 ac (36 ha; 97 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008) and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024); and proposed critical habitat for the threatened North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological feature identified within Unit PR-02 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-03: Río Grande

Unit PR-03 consists of 1,691 ac (685 ha) of marine waters below the MHW line along the coastline of the

Municipality of Río Grande and a small portion towards the west along the Municipality of Loíza, Puerto Rico. The unit starts approximately 0.5 mi (0.8 km) west of Punta Percha and extends farther west along Punta Picúa, Punta Miquillo, and Punta San Agustín, and ending approximately 492 ft (150 m) west of the mouth of the Herrera River. The offshore boundary of this unit extends approximately 3 mi (5 km) from the freshwater sources within the unit, 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership and overlaps with 1,574 ac (626 ha) of the Marine Extent of the Río Espíritu Santo Nature Reserve, managed by the PRDNER. However, there is no management plan in place for this reserve. General land use within this unit includes natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin areas of residential and commercial development.

Unit PR-03 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-03 is one of the three units on the north coast, ensuring good spatial representation of critical habitat on the north coast of Puerto Rico. Approximately 1,666 ac (674 ha; 98 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008) and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-03 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for

in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-04: Fajardo

Unit PR-04 consists of 2,065 ac (836 ha) of marine waters below the MHW line along the coastline of the Municipality of Fajardo and a small portion of the Municipality of Ceiba towards the southern edge of the unit. This unit starts in Punta Fajardo and continues south along the coastline beyond the Fajardo River, Punta Barracas, and Bahía Damajagua, ending on the north side of Punta Figueras. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership. General land use within this unit includes natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin areas of residential and commercial development.

Unit PR-04 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-04 is one of the two units on the east coast, ensuring good spatial representation of critical habitat on the east coast of Puerto Rico. Approximately 2,040 ac (826 ha; 99 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), Nassau grouper (see 89 FR 126, January 2, 2024), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-04 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and

exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-05: Ceiba

Unit PR-05 consists of 6,429 ac (2,602 ha) of marine waters below the MHW line along the coastline of the Municipalities of Ceiba and Naguabo. This unit starts just south of Punta Figuera and extends farther south along the coastline beyond Puerto Medio Mundo, Punta Medio Mundo, Pasaje Medio Mundo, Punta Puerca, Isla de Cabras, Ensenada Honda, Punta Algodones, and Bahía Algodones, ending just north of Punta Lima. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership. General land use within this unit includes natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin areas of residential and commercial development.

Unit PR-05 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-05 is one of the two units on the east coast, ensuring good spatial representation of critical habitat on the east coast of Puerto Rico. Approximately 6,271 ac (2,538 ha; 98 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), Nassau grouper (see 89 FR 126, January 2, 2024), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-05 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving

water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-06: Vieques

Unit PR-06 consists of 4,980 ac (2,015 ha) of marine waters below the MHW line along the west-northwest coastline of the Municipality of Vieques. This unit starts approximately 1 mile (1.5 km) east of Punta Caballo within Ensenada Claque, continues west beyond the Puerto de la Libertad Davis S. Sanes Rodríguez (Mosquito Pier) and towards Punta Arenas, and ends approximately 1 mi (1.7 km) south of Punta Boca Quebrada along the coastline. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 26-ft (8-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership. The southwestern portion of Unit PR-06 has restricted access due to the potential presence of unexploded ordnances (U.S. Department of the Navy and U.S. Environmental Protection Agency 2022, pp. 4, 15, 18). General land use within this unit includes natural resource conservation, wildlife management, recreational and commercial activities (e.g., swimming, fishing, boating), and unexploded ordnance management. Some areas of this unit also adjoin areas of commercial development and the Vieques NWR.

Unit PR-06 is occupied by the subspecies and provides at least two of the three resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: seagrass in shallow water and calm waters for shelter. Unit PR-06 is the only unit in Vieques Island off the southeast coast of Puerto Rico, ensuring good spatial representation of critical habitat in that area. Approximately 4,919 ac (1,991 ha; 99 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), Nassau grouper (see 89 FR 126, January 2, 2024), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026,

August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-07 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-07: Arroyo

Unit PR-07 consists of 15,001 ac (6,071 ha) of marine waters below the MHW line along the coastline of the Municipalities of Patillas, Arroyo, and Guayama. This unit starts approximately 738 ft (225 m) east of the mouth of the Jacoboa River; continues west along the coastline towards Punta Viento, Puerto Patillas, Punta Figuras, and Puerto Arroyo; and ends approximately 0.9 mi (1.5 km) west of Punta Ola Grande. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership and overlaps with approximately 897 ac (363 ha) of the Marine Extent of the Guayama Reef Nature Reserve, managed by the PRDNER. However, there is no management plan in place for this reserve. General land use within this unit includes natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin areas of residential and commercial development.

Unit PR-07 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-07 is the second largest unit and one of the two units on the southeastern coast, ensuring good spatial representation of

critical habitat on the south coast of Puerto Rico. Approximately 14,974 ac (6,060 ha; almost 100 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-07 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-08: Santa Isabel to Jobos Bay

Unit PR-08 consists of 24,360 ac (9,858 ha) of marine waters below the MHW line along the coastline of the Municipalities of Juana Díaz, Santa Isabel, Salinas, and Guayama. This unit starts approximately 1,213 ft (370 m) west of Descalabrado River and continues east along the coastline towards Punta Cayito, Punta Petrona, Bahía de Rincón, and Punta Arenas, including the waters within Mar Negro and around Bahía de Jobos towards Punta Pozuelo. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership and overlaps with approximately 881 ac (357 ha) of the Jobos Bay NERR, with approximately 4,239 ac (1,715 ha) of the Marine Extent of the Punta Petrona Nature Reserve, and with approximately 1,994 ac (807 ha) of the Marine Extent of Isla Caja de Muertos Nature Reserve, managed by the PRDNER. However, only the Jobos Bay NERR has an active management plan (PRDNER and NOAA 2017, entire). General land use within this unit includes natural resource conservation, wildlife management, and

recreational and commercial activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin areas of residential and commercial development.

Unit PR-08 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-08 is the largest unit and contains one of the greatest aggregations of Antillean manatees in Puerto Rico, ensuring good spatial representation of critical habitat on the south coast of Puerto Rico. Approximately 24,153 ac (9,774 ha; 99 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024); and proposed critical habitat for the threatened North Atlantic DPS of the green sea turtle (see 88 FR 46572, July 19, 2023).

Threats to the physical or biological feature identified within Unit PR-08 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-09: Guayanilla

Unit PR-09 consists of 7,404 ac (2,996 ha) of marine waters below the MHW line along the coastline of the Municipalities of Peñuelas and Guayanilla. This unit starts along the coastline of Peñon de Ponce; continues west towards the Tallaboa River, Bahía Tallaboa, Punta Guayanilla, and Punta Pepillo, and around Bahía de Guayanilla towards Punta Verraco; and ends approximately 984 ft (300 m) west of Cerro Toro in Punta Ventana beach. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the

unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership. General land use within this unit includes natural resource conservation, wildlife management, and recreational and commercial activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin areas of residential and commercial development.

Unit PR-09 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-09 is one of the three units on the southwestern coast, ensuring good spatial representation of critical habitat on the south coast of Puerto Rico.

Approximately 7,313 ac (2,960 ha; 99 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-09 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-10: Guánica

Unit PR-10 consists of 1,798 ac (728 ha) of marine waters below the MHW line along the coastline of the Municipality of Guánica. This unit starts approximately 1,312 ft (400 m) west of Punta Jacinto along the coastline towards and around Guánica Bay, including Punta Meseta, Punta Pera, Punta Pescadores, and Ensenada Las Pargas, and ending in Punta Brea. The offshore boundary of this unit extends approximately 820 ft (250 m) from the

outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership and overlaps with approximately 581 ac (235 ha) of the Marine Extent of the Guánica Commonwealth Forest, managed by the PRDNER. However, there is no management plan in place for this forest or the Marine Extent. General land use within this unit includes natural resource conservation, wildlife management, and recreation and commercial activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin areas of residential and commercial development.

Unit PR-10 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-10 is one of the three units on the southwestern coast, ensuring good spatial representation of critical habitat on the south coast of Puerto Rico.

Approximately 1,766 ac (715 ha; 98 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), Nassau grouper (see 89 FR 126, January 2, 2024), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-10 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-11: Bahía Sucia

Unit PR-11 consists of 1,723 ac (697 ha) of marine waters below the MHW line within Bahía Sucia along the

coastline of the Municipality of Cabo Rojo, Puerto Rico. Bahía Sucia extends from Punta Molino on the east and approximately 2 mi (3 km) across to the southwest towards Cabo Rojo. The entire unit is within Commonwealth ownership and overlaps with the Marine Extent of the Boquerón Commonwealth Forest, managed by the PRDNER. However, there is no management plan in place for this area. General land use within this unit includes natural resource conservation, wildlife management, and recreation activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin the Cabo Rojo NWR.

Unit PR-11 is occupied by the subspecies and provides at least two of the three resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: seagrass in shallow water and calm waters for shelter. Unit PR-11 is the farthest west along the south coast, ensuring good spatial representation of critical habitat on the south coast of Puerto Rico.

Approximately 1,704 ac (690 ha; 99 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), Nassau grouper (see 89 FR 126, January 2, 2024), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-11 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-12: Boquerón

Unit PR-12 consists of 1,989 ac (805 ha) of marine waters below the MHW line within Bahía de Boquerón along the coastline of the Municipality of Cabo Rojo. This unit extends from approximately 394 ft (120 m) east of

Punta Melones along the coastline of Bahía de Boquerón, including the waters inside Caño Boquerón, and towards Punta Guaniquilla to the north. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership. General land use within this unit includes natural resource conservation, wildlife management, and recreation and commercial activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin areas of residential and commercial development.

Unit PR-12 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-12 is one of the two units on the west coast and the farthest south along the west coast, ensuring good spatial representation of critical habitat on the west coast of Puerto Rico. Approximately 1,784 ac (722 ha; 90 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), Nassau grouper (see 89 FR 126, January 2, 2024), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-12 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance with manatee and aquatic vegetation considerations.

Unit PR-13: Mayagüez

Unit PR-13 consists of 7,949 ac (3,217 ha) of marine waters below the MHW

line along the coastline of the Municipality of Cabo Rojo and a small portion of the Municipality of Mayagüez. This unit starts approximately 0.9 mi (1.5 km) south of Punta Arenas and continues towards the north along the coastline of Bahía Bramadero, including Punta Guanajibo, to approximately 1,640 ft (500 m) north of the mouth of the Guanajibo River. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership. General land use within this unit includes natural resource conservation, wildlife management, and recreation and commercial activities (e.g., swimming, fishing, boating). Some areas of this unit also adjoin areas of residential and commercial development.

Unit PR-13 is occupied by the subspecies and provides all three of the resources defined as the physical or biological feature essential to the conservation of the Antillean manatee in Puerto Rico: freshwater sources, seagrass in shallow water, and calm waters for shelter. Unit PR-13 is the third largest and one of the two units on the west coast, ensuring good spatial representation of critical habitat on the west coast of Puerto Rico. Approximately 7,944 ac (3,215 ha; almost 100 percent) overlap with designated critical habitat for the threatened elkhorn and staghorn corals (see 73 FR 72210, November 26, 2008), Nassau grouper (see 89 FR 126, January 2, 2024), and five Caribbean coral species (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*) (see 88 FR 54026, August 9, 2023, and 89 FR 19511, March 19, 2024).

Threats to the physical or biological feature identified within Unit PR-13 include foraging and other habitat loss, modification, and degradation; climate change; contaminants; and tropical storms and hurricanes. Special management considerations or protection measures to reduce or alleviate threats may include improving water quality; restoring aquatic vegetation and living shorelines; establishing and enforcing boat speed zones, marked navigation channels, and exclusion areas; developing or revising and implementing standardized construction conservation measures for in-water constructions; and developing or revising and implementing oil spill response and marine debris guidance

with manatee and aquatic vegetation considerations.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species (50 CFR 402.02).

Compliance with the requirements of section 7(a)(2) is documented through our issuance of:

- (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- (2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during formal consultation that:

- (1) Can be implemented in a manner consistent with the intended purpose of the action,
- (2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,
- (3) Are economically and technologically feasible, and
- (4) Would, in the Service Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a

reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 set forth requirements for Federal agencies to reinitiate consultation. Reinitiation of consultation is required and shall be requested by the Federal agency, where discretionary Federal involvement or control over the action has been retained or is authorized by law and: (1) if the amount or extent of taking specified in the incidental take statement is exceeded; (2) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or written concurrence; or (4) if a new species is listed or critical habitat designated that may be affected by the identified action. As provided in 50 CFR 402.16, the requirement to reinitiate consultations for new species listings or critical habitat designation does not apply to certain agency actions (e.g., land management plans issued by the Bureau of Land Management in certain circumstances).

Destruction or Adverse Modification of Critical Habitat

The key factor related to the destruction or adverse modification determination is whether implementation of the proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat as a whole for the conservation of the listed species. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires that our **Federal Register** notices “shall, to the maximum extent practicable also include a brief description and evaluation of those activities (whether public or private) which, in the opinion of the Secretary, if undertaken may adversely modify [critical] habitat, or may be affected by such designation.”

Activities that may be affected by designation of critical habitat for the Florida manatee and Antillean manatee include those that may affect the physical or biological features of the subspecies’ critical habitat (see Physical or Biological Features Essential to the Conservation of the Species).

Exemptions

Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an INRMP by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

- (1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- (2) A statement of goals and priorities;
- (3) A detailed description of management actions to be implemented to provide for these ecological needs; and
- (4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that the Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the DoD, or designated for its use, that are subject to an INRMP prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.

We consult with the military on the development and implementation of INRMPs for installations with listed species. We analyzed INRMPs developed by military installations located within the range of the proposed revised critical habitat designation for the Florida manatee to determine if they meet the criteria for exemption from critical habitat under section 4(a)(3) of the Act. There are no DoD lands with a completed INRMP within the proposed critical habitat designation for the Antillean manatee. The following areas are DoD-owned or controlled lands with completed, Service-approved INRMPs within the proposed revised critical habitat designation for the Florida manatee.

Approved INRMPs

MacDill Air Force Base

We have determined that approximately 4,415 ac (1,787 ha) of submerged lands managed by MacDill Air Force Base are essential to the conservation of the Florida manatee. These specific lands are managed according to their INRMP (U.S. Department of the Air Force 2022a, entire; Borchert 2023, pers. comm.). The Florida manatee is a covered species, and the INRMP provides conservation and habitat management measures applicable to the subspecies. The Service has approved these conservation and management measures, and the INRMP has been signed.

Some of the principles and guidelines listed in the MacDill Air Force Base INRMP to achieve the DoD’s ecosystem management goal that benefit the Florida manatee include maintaining and improving sustainability and native diversity of ecosystems, developing coordinated approaches to achieve ecosystem health, and incorporating adaptive management techniques (U.S. Department of the Air Force 2022a, p. 13). Several management goals and objectives listed in the INRMP directly benefit the Florida manatee and its habitat, including to protect and improve recovery of listed species and their habitats, manage invasive species, and manage natural resources (U.S. Department of the Air Force 2022a, pp. 91–95). Ongoing and planned restoration activities at the installation that benefit manatee habitat include improving stormwater runoff to Tampa Bay, constructing living shorelines, experimentally restoring seagrass in tidal ponds, and potentially restoring seagrass in Tampa Bay (U.S. Department of the Air Force 2022a, pp. 65, 82; Borchert 2023, pers. comm.).

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands are subject to the MacDill Air Force Base INRMP and that conservation efforts identified in the INRMP provide a benefit to the Florida manatee and its habitat. Therefore, lands within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 4,415 ac (1,787 ha) of habitat in Unit FL–04 of this proposed revised critical habitat designation because of this exemption.

U.S. Space Force Space Launch Delta 45

We have determined that approximately 278 ac (112 ha) of submerged lands managed by the U.S.

Space Force Space Launch Delta 45 at Canaveral Space Force Station (216 ac (87 ha)) and Patrick Space Force Base (62 ac (25 ha)) are essential to the conservation of the Florida manatee. These specific lands are managed according to their INRMP (U.S. Department of the Air Force 2022b, entire; Gillikin and Chambers 2023, pers. comm.). The Florida manatee is a covered species, and the INRMP provides conservation and habitat management measures applicable to the subspecies. The Service has approved these conservation and management measures, and the INRMP has been signed.

Some of the elements and principles listed in the Space Launch Delta 45 INRMP to achieve the DoD's ecosystem management goal that benefit the Florida manatee include using an ecosystem approach to management and restoration, adaptively managing natural resources for climate change, fostering sustainability of ecosystem services, and collaborating with regional partners to implement ecosystem management (U.S. Department of the Air Force 2022b, pp. 13–14). Several management goals and objectives listed in the INRMP directly benefit the Florida manatee and its habitat, including to protect listed species and their habitats, manage invasive species, and promote biodiversity and manage natural resources with an ecosystem approach (U.S. Department of the Air Force 2022b, p. 11). Ongoing and planned activities at these installations that benefit manatee habitat include restoring and enhancing wetlands to improve water quality and enhance connections between wetlands and the Banana River, constructing living shorelines, and educating base personnel and rental boat recreationists (U.S. Department of the Air Force 2022a, pp. 160, 813, 818).

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands at Cape Canaveral Space Force Station and Patrick Space Force Base are subject to the Space Launch Delta 45 INRMP and that conservation efforts identified in the INRMP provide a benefit to the Florida manatee and its habitat. Therefore, lands within these installations are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 278 ac (112 ha) of habitat in Unit FL–10 of this proposed revised critical habitat designation because of this exemption.

Naval Air Station Jacksonville Complex

We have determined that approximately 8 ac (3.2 ha) of submerged lands managed by the Naval Air Station Jacksonville Complex at the Rodman Bomb Target property are essential to the conservation of the Florida manatee. These specific lands are managed according to their INRMP (U.S. Department of the Navy 2019, entire; Jackson 2023a, pers. comm.). The Florida manatee is a covered species, and the INRMP provides conservation and habitat management measures applicable to the subspecies. The Service has approved these conservation and management measures, and the INRMP has been signed.

Some of the goals and objectives listed in the Naval Air Station Jacksonville Complex INRMP to achieve the DoD's ecosystem management goal that benefit the Florida manatee include protecting, maintaining, and restoring natural resources, and implementing training, education, and stewardship initiatives for ecosystem management (U.S. Department of the Navy 2019, pp. ES–2–ES–3). Several strategies listed in the INRMP directly benefit the Florida manatee and its habitat, including minimizing pollutant load in stormwater runoff, managing invasive species, protecting and enhancing listed species and their habitats, and educating personnel and citizens in ecosystem management and stewardship (U.S. Department of the Navy 2019, pp. 4–3–4–7, 4–14, 4–21). Ongoing and planned projects at the Rodman Bomb Target that benefit manatee habitat include installing education signs for manatee habitat protection and implementing various water quality protection actions (U.S. Department of the Navy 2019, pp. 5–86; Jackson 2023b, pers. comm.).

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands at the Rodman Bomb Target property are subject to the Naval Air Station Jacksonville Complex INRMP and that conservation efforts identified in the INRMP provide a benefit to the Florida manatee and its habitat. Therefore, lands within this property are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 8 ac (3.2 ha) of habitat in Unit FL–11 of this proposed revised critical habitat designation because of this exemption.

Consideration of Impacts Under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. Exclusion decisions are governed by the regulations at 50 CFR 424.19 and the Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (hereafter, the “2016 Policy”; 81 FR 7226, February 11, 2016), both of which were developed jointly with the National Marine Fisheries Service. We also refer to a 2008 Department of the Interior Solicitor's opinion entitled, “The Secretary's Authority to Exclude Areas from a Critical Habitat Designation under Section 4(b)(2) of the Endangered Species Act” (M–37016).

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise discretion to exclude the area only if such exclusion would not result in the extinction of the species. In making the determination to exclude a particular area, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor. In our final rules, we explain any decision to exclude areas, as well as decisions not to exclude, to make clear the rational basis for our decision. We describe below the process that we use for taking into consideration each category of impacts and any initial analyses of the relevant impacts.

Consideration of Economic Impacts

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. To assess the probable economic impacts of a designation, we must first evaluate specific land uses or activities and projects that may occur in the area of the critical habitat. We then must evaluate the impacts that a specific

critical habitat designation may have on restricting or modifying specific land uses or activities for the benefit of the species and its habitat within the areas proposed. We then identify which conservation efforts may be the result of the species being listed under the Act versus those attributed solely to the designation of critical habitat for this particular species. The probable economic impact of a proposed critical habitat designation is analyzed by comparing scenarios both “with critical habitat” and “without critical habitat.”

The “without critical habitat” scenario represents the baseline for the analysis, which includes the existing regulatory and socio-economic burden imposed on landowners, managers, or other resource users potentially affected by the designation of critical habitat (e.g., under the Federal listing as well as other Federal, State, and local regulations). Therefore, the baseline represents the costs of all efforts attributable to the listing of the species under the Act (i.e., conservation of the species and its habitat incurred regardless of whether critical habitat is designated). The “with critical habitat” scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts would not be expected without the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat, above and beyond the baseline costs. These are the costs we use when evaluating the benefits of inclusion and exclusion of particular areas from the final designation of critical habitat should we choose to conduct a discretionary section 4(b)(2) exclusion analysis.

Executive Order (E.O.) 14094 supplements and reaffirms E.O. 12866 and E.O. 13563 and directs Federal agencies to assess the costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consistent with the E.O. regulatory analysis requirements, our effects analysis under the Act may take into consideration impacts to both directly and indirectly affected entities, where practicable and reasonable. If sufficient data are available, we assess to the extent practicable the probable impacts to both directly and indirectly affected entities. To determine whether the designation of critical habitat may have an economic effect of \$200 million or more in any given year (which would trigger section 3(f)(1) of E.O. 12866, as amended by E.O. 14094), we used a screening analysis to assess whether a

revised designation of critical habitat for the Florida manatee and a designation of critical habitat for the Antillean manatee are likely to exceed this threshold.

For these particular designations, we developed an incremental effects memorandum (IEM) considering the probable incremental economic impacts that may result from the proposed revised and proposed designations of critical habitat. The information contained in our IEM was then used to develop a screening analysis of the probable effects of the revised designation of critical habitat for the Florida manatee and proposed designation for the Antillean manatee (Industrial Economics, Inc. (IEC) 2024, entire).

We began by conducting a screening analysis of the proposed revised critical habitat designation for the Florida manatee and the proposed critical habitat designation for the Antillean manatee in order to focus our analysis on the key factors that are likely to result in incremental economic impacts. The purpose of the screening analysis is to filter out particular geographical areas of critical habitat that are already subject to such protections and are, therefore, unlikely to incur incremental economic impacts. In particular, the screening analysis considers baseline costs (i.e., no revision to critical habitat and the existing critical habitat designation remains in place for the Florida manatee and no critical habitat designation for the Antillean manatee) and includes any probable incremental economic impacts where land and water use may already be subject to conservation plans, land management plans, best management practices, or regulations that protect the habitat area as a result of the Federal listing status of the species. Ultimately, the screening analysis allows us to focus our analysis on evaluating the specific areas or sectors that may incur probable incremental economic impacts as a result of the designation.

The presence of the listed species in occupied areas of critical habitat means that any destruction or adverse modification of those areas is also likely to jeopardize the continued existence of the species. Therefore, designating occupied areas as critical habitat typically causes little if any incremental impacts above and beyond the impacts of listing the species. As a result, we generally focus the screening analysis on areas of unoccupied critical habitat (unoccupied units or unoccupied areas within occupied units).

Overall, the screening analysis assesses whether designation of critical

habitat is likely to result in any additional management or conservation efforts that may incur incremental economic impacts. This screening analysis combined with the information contained in our IEM constitute what we consider to be our economic analysis of the proposed revised critical habitat designation for the Florida manatee and proposed critical habitat designation for the Antillean manatee and is summarized in the narrative below.

As part of our screening analysis, we considered the types of economic activities that are likely to occur within the areas that would be likely to be affected by the proposed critical habitat designations. In our evaluation of the probable incremental economic impacts that may result from the proposed designations, first we identified, in the IEM dated September 15, 2023, probable incremental economic impacts associated with the following categories of activities: aquaculture, border protection, conservation, restoration, dredging, flood control, in-water construction, power generation, recreation, shoreline stabilization, transportation, unexploded ordnance management, utilities, and water quality management. We considered each industry or category individually. Additionally, we considered whether these activities have any Federal involvement. Critical habitat designation generally will not affect activities that do not have any Federal involvement; under the Act, designation of critical habitat only affects activities conducted, funded, permitted, or authorized by Federal agencies. Because the West Indian manatee species (*Trichechus manatus*) is the listed entity, in areas where either Florida or Antillean manatees are present, Federal agencies are required to consult with the Service under section 7 of the Act on activities they authorize, fund, or carry out that may affect the subspecies, regardless of whether we finalize these proposed critical habitat rules. If we finalize these proposed critical habitat designations, Federal agencies would be required to consider the effects of their actions on the designated habitat. If the Service finds that a particular Federal action is likely to result in jeopardy to the species or that the action will destroy or adversely modify the species' critical habitat, the Service will identify reasonable and prudent alternatives to avoid the jeopardy to the species or the destruction or adverse modification of its designated critical habitat.

In our IEM, we attempted to clarify the distinction between the effects that would result from the subspecies being listed and those attributable to the

critical habitat designations (*i.e.*, difference between the jeopardy and adverse modification standards) for each of the subspecies. The following specific circumstances help to inform our evaluation: (1) The essential physical or biological features identified for critical habitat are the same features essential for the life requisites for each of the subspecies, and (2) any actions that would likely adversely affect the essential physical or biological features of occupied critical habitat are also likely to adversely affect each of the subspecies itself. The IEM outlines our rationale concerning this limited distinction between baseline conservation efforts and incremental impacts of the revision and designation of critical habitat for these subspecies. This evaluation of the incremental effects has been used as the basis to evaluate the probable incremental economic impacts of these proposed designations of critical habitat.

The proposed revised critical habitat designation for the Florida manatee includes 12 units totaling approximately 1,904,191 ac (770,599 ha) and the proposed critical habitat designation for the Antillean manatee includes 13 units totaling approximately 78,121 ac (31,614 ha), all of which were occupied at the time of listing and are occupied now. Additionally, because 705,552 ac (285,527 ha) of the proposed revised critical habitat for the Florida manatee overlap with the existing critical habitat for the Florida manatee and all units in Florida and Puerto Rico are occupied, the economic costs of these designations will most likely be limited to additional administrative effort to consider effects to critical habitat during section 7 consultations only within the 1,198,639 ac (485,072 ha) proposed to be added in Florida and 78,121 ac (31,614 ha) proposed in Puerto Rico. This finding is based on the following (IEC 2024, pp. 3, 26):

(1) All 12 proposed revised units in Florida and the 13 proposed units in Puerto Rico are considered occupied by the subspecies, and occupied units are afforded significant baseline protection under the Act due to the presence of the listed entity;

(2) All projects with a Federal nexus would be subject to section 7 consultation regardless of the designation of critical habitat due to the presence of the listed entity;

(3) Critical habitat is not likely to change the Service's recommendation for project modifications as part of future consultations considering the Florida manatee or Antillean manatee; and

(4) Florida and Antillean manatees receive additional baseline protection from co-occurring listed species and their critical habitats, including existing critical habitat for the Florida manatee. Total overlap with

existing critical habitat (for several species) is 60 percent in Florida, with 1,140,080 ac (458,119 ha) across 10 units; total overlap with existing critical habitat (for elkhorn and staghorn corals, as well as other species) is 95 percent in Puerto Rico, with 74,350 ac (30,088 ha) across 13 units (Service 2023d, pp. 40–41).

Based on the consultation history for the Florida manatee in proposed revised critical habitat areas, the number of future consultation actions is likely to be approximately 216 per year (approximately 129 informal consultations and 87 technical assistance efforts) in Florida (IEC 2024, p. 14–15). Based on the consultation history for the Antillean manatee in proposed critical habitat areas, the number of future consultation actions is likely to be approximately 21 per year (approximately 5 informal consultations and 16 technical assistance efforts) in Puerto Rico (IEC 2024, p. 14–15). We expect formal consultations for each subspecies or their critical habitat to be infrequent due to the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 *et seq.*) prohibiting the authorization of take of marine mammals and due to many other Federal and State regulations that protect manatees and their habitat in both Florida and Puerto Rico (Service 2023d, pp. 48–51, 60–61). The incremental costs of considering effects to critical habitat, based on the number of future consultations multiplied by the cost of effort (\$2,700 for informal consultations and \$430 for technical assistance efforts) are expected to be approximately \$170,000 per year (2023 dollars) for the additional critical habitat areas within the Florida manatee designation and \$20,000 for the Antillean manatee designation (IEC 2024, p. 17). The screening analysis also calculated the incremental cost savings of removing 259,842 ac (105,154 ha) of the existing critical habitat designation in Florida. Based on the expected number of future consultations in those areas having a reduced effort (*i.e.*, no longer considering effects to critical habitat; 34 consultations per year (19 informal consultations and 14 technical assistance efforts)), the cost savings is estimated to be approximately \$57,000 per year (2023 dollars) (IEC 2024, pp. 18–19). Therefore, the expected net effect in the increase of annual administrative costs for the proposed revised critical habitat designation for the Florida manatee is approximately \$110,000, and for the proposed critical habitat designation for the Antillean manatee is approximately \$20,000 (2023 dollars) (IEC 2024, pp. 19–20).

The proposed designations are not expected to trigger additional

requirements under State, Commonwealth, or other local government regulations. Similarly, we do not anticipate the easing of any requirements where the proposed revised critical habitat removes areas previously designated in Florida. However, a new designation may cause developers or landowners to perceive that private lands within the previously undesignated areas would incur lower property values due to the perception that critical habitat will preclude, limit, or slow development, or somehow alter the highest and best use of the property (IEC 2024, p. 23). While perceptual effects on land values are possible, the likelihood and magnitude of such effects are uncertain, and data limitations also prevent the quantification of the possible incremental reduction in property values (IEC 2024, p. 24).

In conclusion, the costs associated with the proposed revised critical habitat designation for the Florida manatee and proposed critical habitat designation for the Antillean manatee would be administrative in nature and are not anticipated to reach \$200 million in any given year based on the anticipated number of consultations and associated consultation costs. Additionally, incremental economic benefits of adding new critical habitat areas and forgone benefits of removing existing critical habitat areas are not anticipated. Therefore, the Office of Management and Budget has determined, based on our screening analysis, that this is not a significant regulatory action under section 3(f)(1) of E.O. 12866, as amended by E.O. 14094.

We are soliciting data and comments from the public on the economic analysis discussed above. During the development of the final designations, we will consider the information presented in the economic analysis and any additional information on economic impacts we receive during the public comment period to determine whether any specific areas should be excluded from the final critical habitat designations under the authority of section 4(b)(2) of the Act, our implementing regulations at 50 CFR 424.19, and the 2016 Policy. We may exclude an area from critical habitat if we determine that the benefits of excluding the area outweigh the benefits of including the area, provided the exclusion will not result in the extinction of either subspecies.

Consideration of National Security Impacts

Section 4(a)(3)(B)(i) of the Act may not cover all DoD lands or areas that

pose potential national-security concerns (e.g., a DoD installation that is in the process of revising its INRMP for a newly listed species or a species previously not covered). If a particular area is not covered under section 4(a)(3)(B)(i), then national-security or homeland-security concerns are not a factor in the process of determining what areas meet the definition of “critical habitat.” However, we must still consider impacts on national security, including homeland security, on those lands or areas not covered by section 4(a)(3)(B)(i) because section 4(b)(2) requires us to consider those impacts whenever we designate critical habitat. Accordingly, if DoD, Department of Homeland Security (DHS), or another Federal agency has requested exclusion based on an assertion of national-security or homeland-security concerns, or we have otherwise identified national-security or homeland-security impacts from designating particular areas as critical habitat, we generally have reason to consider excluding those areas.

However, we cannot automatically exclude requested areas. When DoD, DHS, or another Federal agency requests exclusion from critical habitat on the basis of national-security or homeland-security impacts, we must conduct an exclusion analysis if the Federal requester provides information, including a reasonably specific justification of an incremental impact on national security that would result from the designation of that specific area as critical habitat. That justification could include demonstration of probable impacts, such as impacts to ongoing border-security patrols and surveillance activities, or a delay in training or facility construction, as a result of compliance with section 7(a)(2) of the Act. If the agency requesting the exclusion does not provide us with a reasonably specific justification, we will contact the agency to recommend that it provide a specific justification or clarification of its concerns relative to the probable incremental impact that could result from the designation. If we conduct an exclusion analysis because the agency provides a reasonably specific justification or because we decide to exercise the discretion to conduct an exclusion analysis, we will defer to the expert judgment of DoD, DHS, or another Federal agency as to: (1) Whether activities on its lands or waters, or its activities on other lands or waters, have national-security or homeland-security implications; (2) the importance of those implications; and (3) the degree to which the cited

implications would be adversely affected in the absence of an exclusion. In that circumstance, in conducting a discretionary section 4(b)(2) exclusion analysis, we will give great weight to national-security and homeland-security concerns in analyzing the benefits of exclusion.

Under section 4(b)(2) of the Act, we also consider whether a national security or homeland security impact might exist on lands owned or managed by DoD or DHS. In preparing this proposal, we have determined that, other than the lands exempted under section 4(a)(3)(B)(i) of the Act based upon the existence of an approved INRMP (see Exemptions, above), the lands within the proposed designations are not owned or managed by DoD or DHS. Therefore, we anticipate no impact on national security or homeland security.

Consideration of Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security discussed above. To identify other relevant impacts that may affect the exclusion analysis, we consider a number of factors, including whether there are permitted conservation plans covering the species in the area—such as safe harbor agreements (SHAs), candidate conservation agreements with assurances (CCAAs), or “conservation benefit agreements” or “conservation agreements” (CBAs) (CBAs are a new type of agreement replacing SHAs and CCAAs in use after April 2024 (89 FR 26070; April 12, 2024) or HCPs, or whether there are non-permitted conservation agreements and partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at whether Tribal conservation plans or partnerships, Tribal resources, or government-to-government relationships of the United States with Tribal entities may be affected by the designation. We also consider any State, local, social, or other impacts that might occur because of the designation.

Summary of Exclusions Considered Under Section 4(b)(2) of the Act

At this time, we are not considering any exclusions from the proposed designations based on economic impacts, national security impacts, or other relevant impacts—such as partnerships, management, or protection afforded by cooperative management efforts—under section 4(b)(2) of the Act. In preparing these proposed

designations, we have determined that no HCPs, SHAs, or CCAAs currently exist, and the proposed designations do not include any Tribal lands or trust resources or any lands for which designation would have any economic or national security impacts. Most areas within the Florida manatee’s proposed revised designation are included in Federal, State, and local management and conservation plans, as well as many county manatee protection plans, but only a few areas within the Antillean manatee’s proposed designation are included in State marine reserve management plans (Service 2023d, pp. 41–61). These plans do not provide conservation equal to or more than the protections that result from a critical habitat designation and most are nonregulatory. In addition, implementation of these plans is not impacted where they overlap with the current Florida manatee critical habitat designation and is not expected to be impacted where they overlap with the new areas proposed in each subspecies’ designation. Therefore, we are not considering areas covered by these plans for exclusion under section 4(b)(2) of the Act for the proposed critical habitat designations for either subspecies.

However, if through the public comment period we receive information that we determine indicates that there are economic, national security, or other relevant impacts from designating particular areas as critical habitat, then as part of developing the final designations of critical habitat, we will evaluate that information and may conduct a discretionary exclusion analysis to determine whether to exclude those areas under the authority of section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19. If we receive a request for exclusion of a particular area and after evaluation of supporting information we do not exclude, we will fully explain our decision in the final rule for this action. Please see **ADDRESSES**, above, for instructions on how to submit comments.

Required Determinations

Clarity of the Rule

We are required by E.O.s 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;

(4) Be divided into short sections and sentences; and

(5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

Regulatory Planning and Review
(Executive Orders 12866, 13563, and 14094)

Executive Order (E.O.) 14094 amends and reaffirms the principles of E.O. 12866 and E.O. 13563 and states that regulatory analysis should facilitate agency efforts to develop regulations that serve the public interest, advance statutory objectives, and are consistent with E.O. 12866, E.O. 13563, and the Presidential Memorandum of January 20, 2021 (Modernizing Regulatory Review). Regulatory analysis, as practicable and appropriate, shall recognize distributive impacts and equity, to the extent permitted by law. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this proposed rule in a manner consistent with these requirements.

E.O. 12866, as reaffirmed by E.O. 13563 and amended and reaffirmed by E.O. 14094, provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget (OMB) will review all significant rules. OIRA has determined that this rule is significant.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; title II of Pub. L. 104–121, March 29, 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a

substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and Service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine whether potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

Under the RFA, as amended, and as understood in light of recent court decisions, Federal agencies are required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself; in other words, the RFA does not require agencies to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, only Federal action agencies would be directly regulated if we adopt the proposed critical habitat designations. The RFA does not require evaluation of the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities.

Therefore, because no small entities would be directly regulated by this rulemaking, the Service certifies that, if made final as proposed, the proposed critical habitat designations will not have a significant economic impact on a substantial number of small entities.

In summary, we have considered whether the proposed designations would result in a significant economic impact on a substantial number of small entities. For the above reasons and based on currently available information, we certify that, if made final, the proposed critical habitat designations will not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare statements of energy effects “to the extent permitted by law” when undertaking actions identified as significant energy actions (66 FR 28355, May 22, 2001). E.O. 13211 defines a “significant energy action” as an action that (i) is a significant regulatory action under E.O. 12866 or any successor order; and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy. This rule is not a significant regulatory action under E.O. 12866 or E.O. 14094 (88 FR 21879, April 11, 2023). Therefore, this action is not a significant energy action, and there is no requirement to prepare a statement of energy effects for this action.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following finding:

(1) This proposed rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or Tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary

Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and Tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or Tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions are not likely to destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule would significantly or uniquely affect small governments because most (91 percent; see table 1, above) lands within the proposed revised designation for the Florida manatee are within Federal or State ownership, and 100 percent (see table 2, above) of lands within the proposed designation for the Antillean manatee are within State ownership. The small percentage (7 percent; see table 1, above) of local government lands included in the proposed revised

designation for the Florida manatee will be affected only to the extent that any programs having Federal funds, permits, or other authorized activities must ensure that their actions will not adversely affect the critical habitat. Therefore, a small government agency plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of revising critical habitat for the Florida manatee and proposing critical habitat for the Antillean manatee in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures, or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed for the proposed designations, and it concludes that, if adopted, these designations of critical habitat do not pose significant takings implications for lands within or affected by the proposed designations.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), this proposed rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of these proposed critical habitat designations with, appropriate State and Commonwealth resource agencies. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the proposed rule does not have substantial direct effects either on the States, or on the relationship between

the Federal government and the States, or on the distribution of powers and responsibilities among the various levels of government. The proposed designations may have some benefit to these governments because the areas that contain the features essential to the conservation of each subspecies are more clearly defined, and the physical or biological features of the habitat necessary for the conservation of each subspecies are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist State and local governments in long-range planning because they no longer have to wait for case-by-case section 7 consultations to occur.

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) of the Act would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with E.O. 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule would not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed revising and designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of each subspecies, this proposed rule identifies the physical or biological features essential to the conservation of each subspecies. The proposed areas of critical habitat are presented on maps, and the proposed rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain information collection requirements, and a submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) is not required. We may not conduct or sponsor and you are not required to respond to a collection of information unless it

displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

Regulations adopted pursuant to section 4(a) of the Act are exempt from the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) and do not require an environmental analysis under NEPA. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This includes listing, delisting, and reclassification rules, as well as critical habitat designations and species-specific protective regulations promulgated concurrently with a decision to list or reclassify a species as threatened. In a line of cases starting with *Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), the courts have upheld this position.

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951, May 4, 1994), E.O. 13175 (Consultation and Coordination with Indian Tribal Governments), the President's memorandum of November 30, 2022 (Uniform Standards for Tribal Consultation; 87 FR 74479, December 5, 2022), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with federally recognized Tribes and Alaska Native Corporations (ANCs) on a government-to-government basis. In accordance with Secretary's Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. We have determined that no Tribal lands fall within the boundaries of the proposed revised critical habitat for the Florida manatee or the proposed critical habitat for the Antillean manatee, so no Tribal lands would be affected by the proposed designations.

References Cited

A complete list of references cited in this rulemaking is available on the internet at <https://www.regulations.gov> and upon request from the Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this proposed rule are the staff members of the Fish and Wildlife Service's Species Assessment Team and the Florida and Caribbean Ecological Services Field Offices.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Plants, Reporting and recordkeeping requirements, Transportation, Wildlife.

Signing Authority

Martha Williams, Director of the U.S. Fish and Wildlife Service, approved this action on August 21, 2024, for publication. On September 12, 2024, Martha Williams authorized the undersigned to sign the document electronically and submit it to the Office of the Federal Register for publication as an official document of the U.S. Fish and Wildlife Service.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

■ 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

■ 2. In § 17.95, amend paragraph (a) by:
 ■ a. Adding an entry for “Antillean Manatee (*Trichechus manatus manatus*)” after the entry for “Canada Lynx (*Lynx canadensis*)”; and
 ■ b. Revising the entry, including the heading, for “Florida Manatee (*Trichechus manatus*)”.

The addition and revision read as follows:

§ 17.95 Critical habitat—fish and wildlife.

(a) *Mammals.*

* * * * *

Antillean Manatee (*Trichechus manatus manatus*)

(1) Critical habitat units are depicted for the Municipalities of Arroyo, Cabo

Rojo, Ceiba, Fajardo, Guánica, Guayama, Guayanilla, Juana Díaz, Loíza, Mayagüez, Naguabo, Patillas, Peñuelas, Río Grande, Salinas, San Juan, Santa Isabel, Toa Baja, and Vieques in the Commonwealth of Puerto Rico on the maps in this entry.

(2) Within these areas, the physical or biological feature essential to the conservation of the Antillean manatee consists of nearshore marine waters with at least two of the following resources within a 3-mile (5-kilometer) radius: (i) Freshwater sources, such as streams and wastewater outfalls;

(ii) Seagrass in waters less than 43 feet (ft) (13 meters (m)) deep; and

(iii) Calm waters, such as shallow bays and coves, with water depths less than 9.8 ft (3 m) and wave heights less than 0.98 ft (0.3 m).

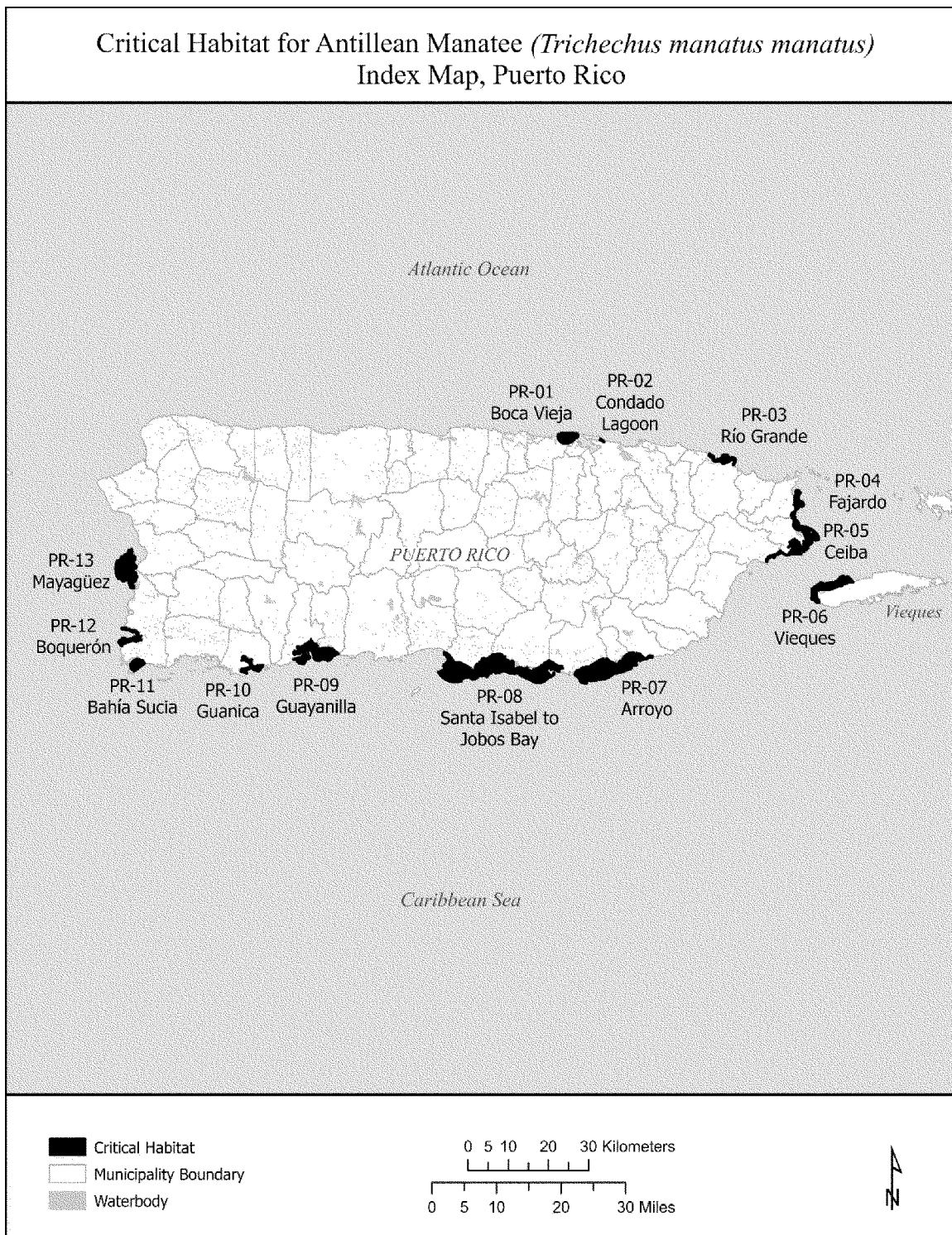
(3) Critical habitat includes waters up to the ordinary high-water line. Critical habitat does not include areas of dry land such as small islands or rock outcrops or federally maintained navigational channels.

(4) Data layers defining map units were created using Esri ArcGIS mapping software along with various spatial data layers provided by multiple local and regional sources as available (*e.g.*, published data, unpublished reports, databases, and data maintained by universities, the Puerto Rico Department of Natural and Environmental Resources, the U.S. Geological Survey, U.S. Environmental Protection Agency, and the National Oceanographic and Atmospheric Administration across the range of the subspecies). The projection used in mapping and calculating distances and locations was Puerto Rico State Plane, North American Datum of 1983. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at <https://www.regulations.gov> at Docket No. FWS–R4–ES–2024–0073 and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Index map follows:

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Figure 1 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (5)



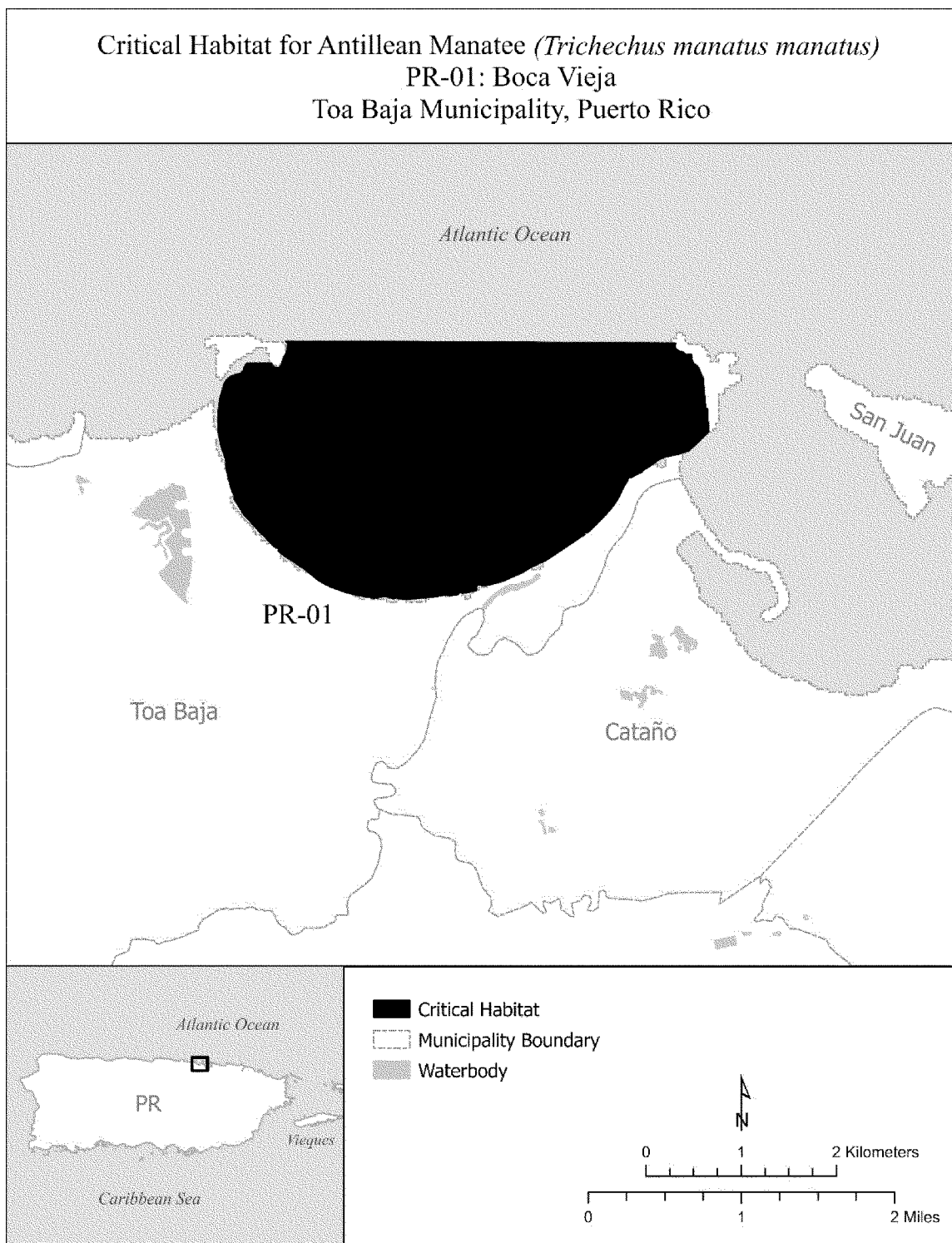
(6) Unit PR-01: Boca Vieja; Toa Baja Municipality, Puerto Rico.

(i) Unit PR-01 consists of 2,640 acres (ac) (1,068 hectares (ha)) of marine waters below the mean high water (MHW) line within the Ensenada Boca

Vieja along the coastline of the Municipality of Toa Baja, Puerto Rico. The unit extends from the northernmost point of Isla de Cabra on the east and approximately 3 miles (mi) (5 kilometers (km)) across towards Punta

Salinas to the west. The entire unit is within Commonwealth ownership.

(ii) Map of PR-01 follows: Figure 2 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (6)(ii)



(7) Unit PR-02: Condado Lagoon; San Juan Municipality, Puerto Rico.

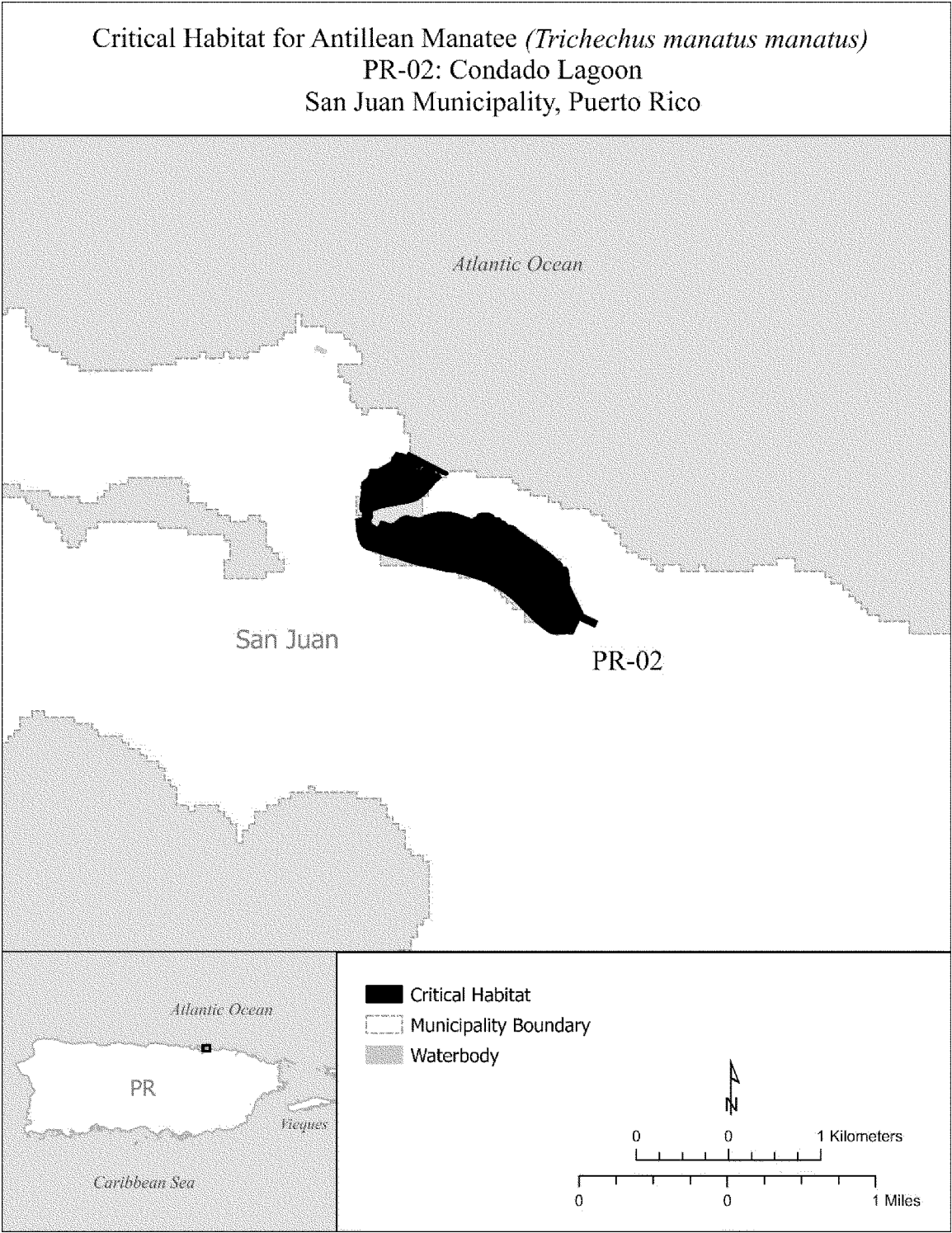
(i) Unit PR-02 consists of 91 ac (37 ha) of marine waters below the MHW line within the Condado Lagoon and El Boquerón along the coastline of the Municipality of San Juan, Puerto Rico. The Condado Lagoon is bounded by the Condado Peninsula to the north, the Baldorioty de Castro Expressway to the

south, and the San Antonio and the Dos Hermanos bridges on the west and northwest respectively. This unit also includes the marine waters of El Boquerón that connect with the Condado Lagoon and are geographically separated by the Dos Hermanos Bridge. This unit extends from the Condado Lagoon to El Boquerón along the eastern coastline towards Playita del Condado,

and approximately 705 feet (ft) (215 meters (m)) across towards the San Jerónimo del Boquerón Fort to the west. The entire unit is within Commonwealth ownership and overlaps with the Condado Lagoon Nature Reserve.

(ii) Map of Unit PR-02 follows:

Figure 3 to Antillean Manatee
(*Trichechus manatus manatus*)
paragraph (7)(ii)



(8) Unit PR-03: Río Grande; Río Grande and Loíza Municipalities, Puerto Rico.

(i) Unit PR-03 consists of 1,691 ac (685 ha) of marine waters below the

MHW line along the coastline of the Municipality of Río Grande and a small portion towards the west along the Municipality of Loíza, Puerto Rico. The unit starts approximately 0.5 miles (mi)

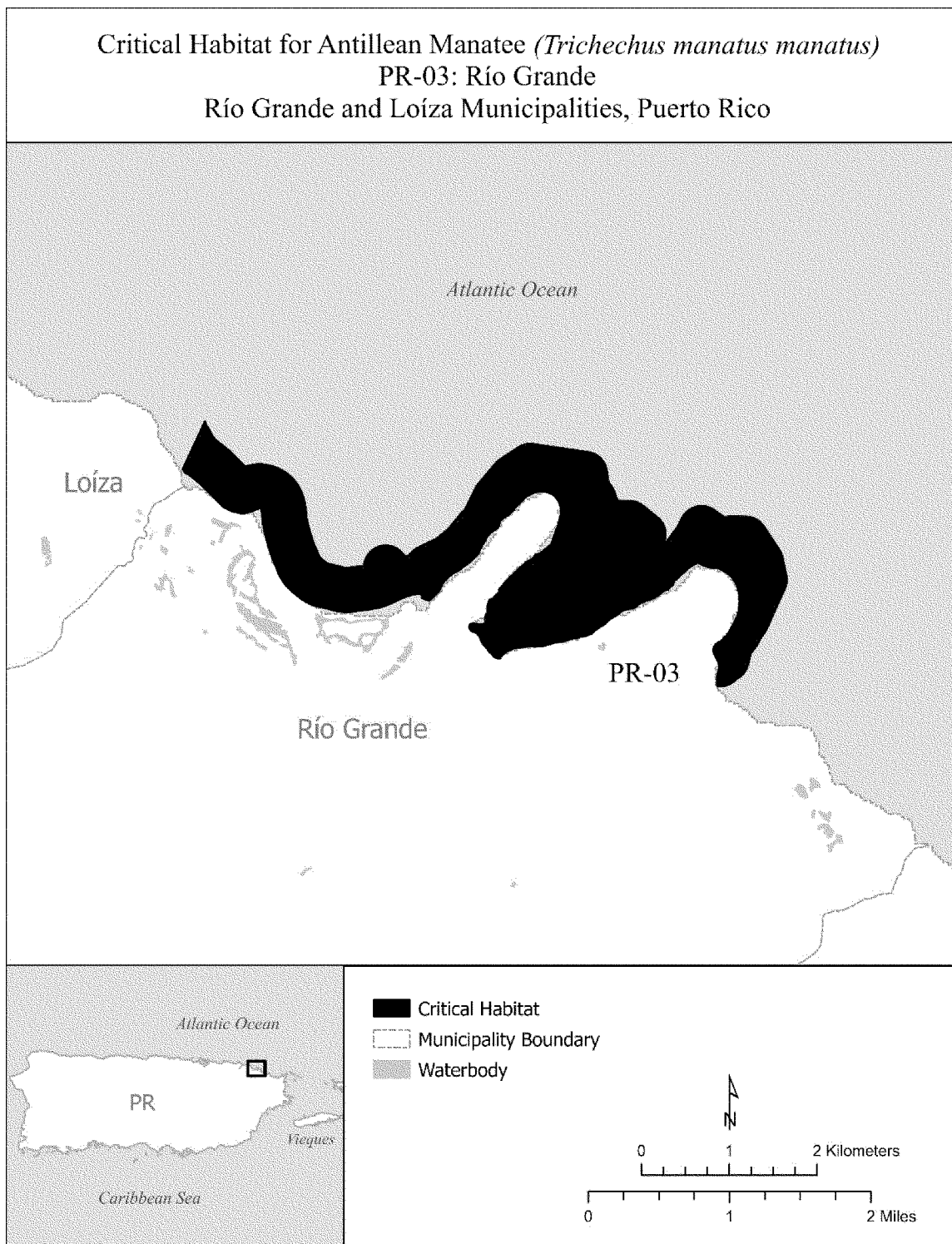
(0.8 kilometers (km)) west of Punta Percha; extends farther west along Punta Picúa, Punta Miquillo, and Punta San Agustín; and ends approximately 492 feet (ft) (150 meters (m)) west of the

mouth of the Herrera River. The offshore boundary of this unit extends approximately 3 mi (5 km) from the freshwater sources within the unit, 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft

(500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership and overlaps

with a portion of the Marine Extent of the Río Espíritu Santo Nature Reserve.

(ii) Map of Unit PR-03 follows: Figure 4 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (8)(ii)



(9) Unit PR-04: Fajardo; Fajardo and Ceiba Municipalities, Puerto Rico.

(i) Unit PR-04 consists of 2,065 ac (836 ha) of marine waters below the

MHW line along the coastline of the Municipality of Fajardo and a small

portion of the Municipality of Ceiba towards the southern edge of the unit. This unit starts in Punta Fajardo; continues south along the coastline by the Fajardo River, Punta Barracas, and Bahía Damajagua; and ends on the north side of Punta Figueras. The offshore

boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest

to shore. The entire unit is within Commonwealth ownership.

(ii) Map of Unit PR-04 follows: Figure 5 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (9)(ii)



(10) Unit PR-05: Ceiba; Ceiba and Naguabo Municipalities, Puerto Rico.

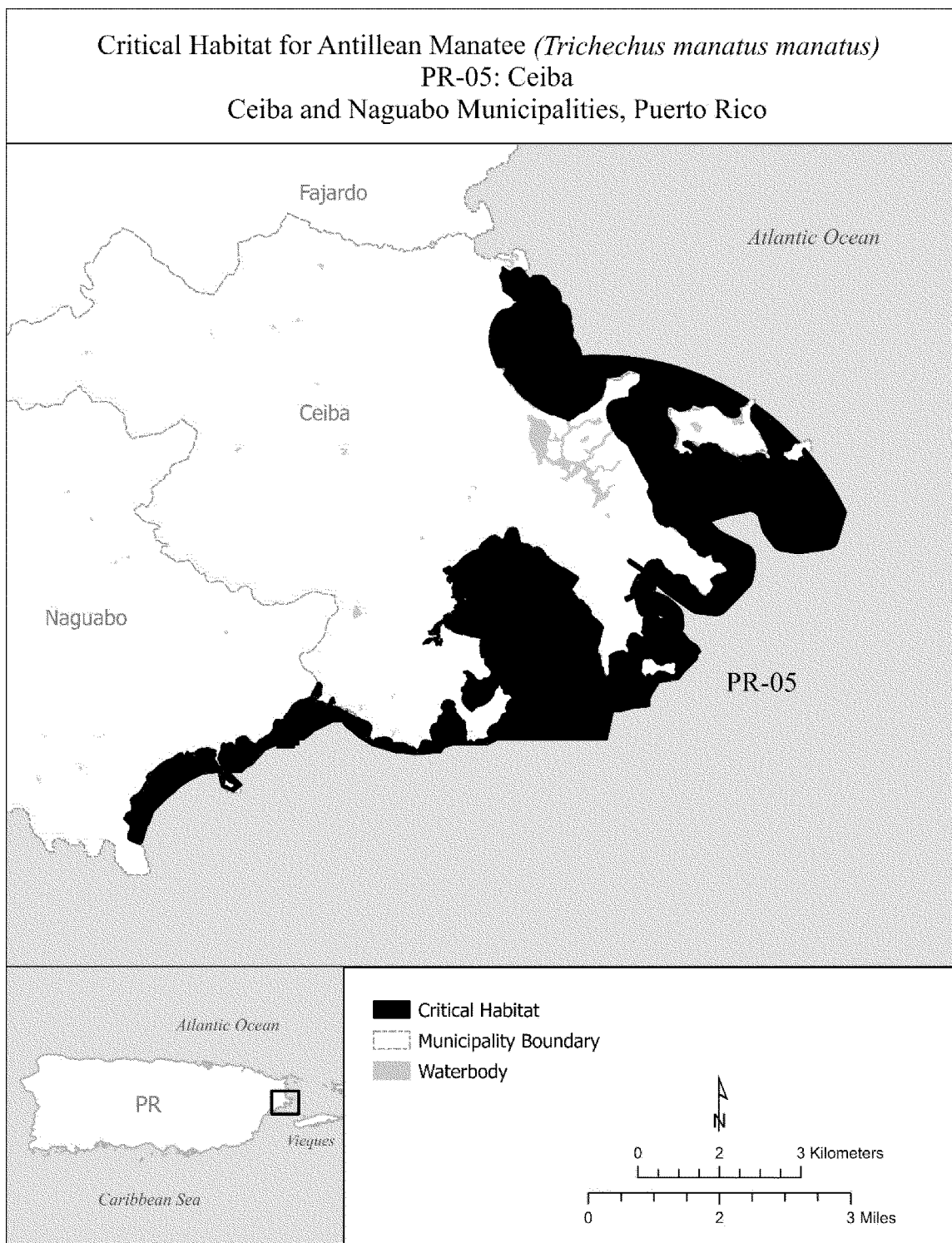
(i) Unit PR-05 consists of 6,429 ac (2,602 ha) of marine waters below the MHW line along the coastline of the Municipalities of Ceiba and Naguabo. This unit starts just south of Punta Figuera; extends farther south along the coastline by Puerto Medio Mundo,

Punta Medio Mundo, Pasaje Medio Mundo, Punta Puerca, Isla de Cabras, Ensenada Honda, Punta Algodones, and Bahía Algodones; and ends just north of Punta Lima. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped,

or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership.

(ii) Map of Unit PR-05 follows:

Figure 6 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (10)(ii)



(11) Unit PR-06: Vieques; Vieques Municipality, Puerto Rico.

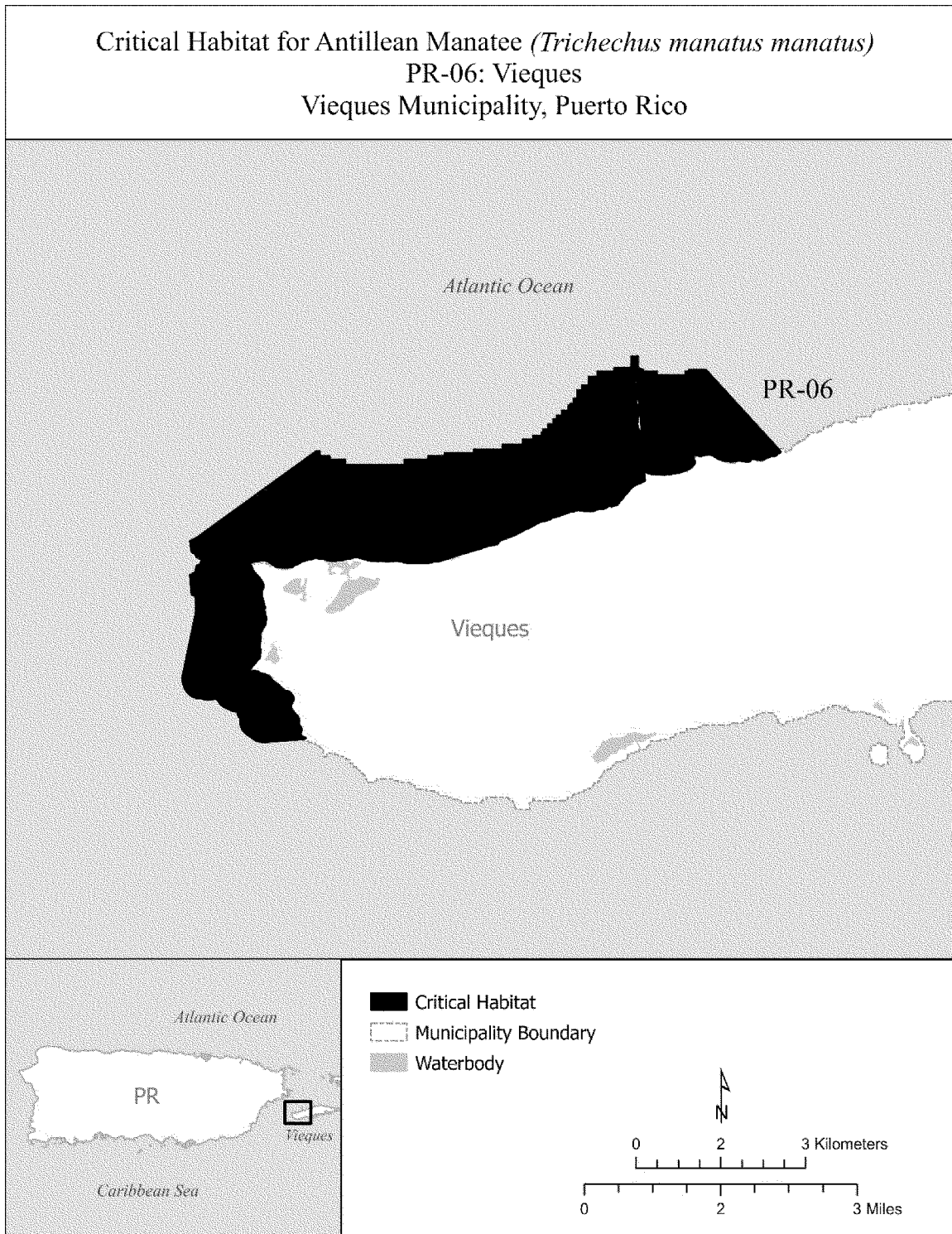
(i) Unit PR-06 consists of 4,980 ac (2,015 ha) of marine waters below the MHW line along the west-northwest coastline of the Municipality of Vieques. This unit starts approximately 1 mile (1.5 km) east of Punta Caballo within Ensenada Claque, continues west by the

Puerto de la Libertad Davis S. Sanes Rodríguez (Mosquito Pier) and towards Punta Arenas, and ends approximately 1 mile (1.7 km) south of Punta Boca Quebrada along the coastline. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no

seagrass was mapped, or to the 26-ft (8-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership.

(ii) Map of Unit PR-06 follows:

Figure 7 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (11)(ii)



(12) Unit PR-07: Arroyo; Guayama, Arroyo, and Patillas Municipalities, Puerto Rico.

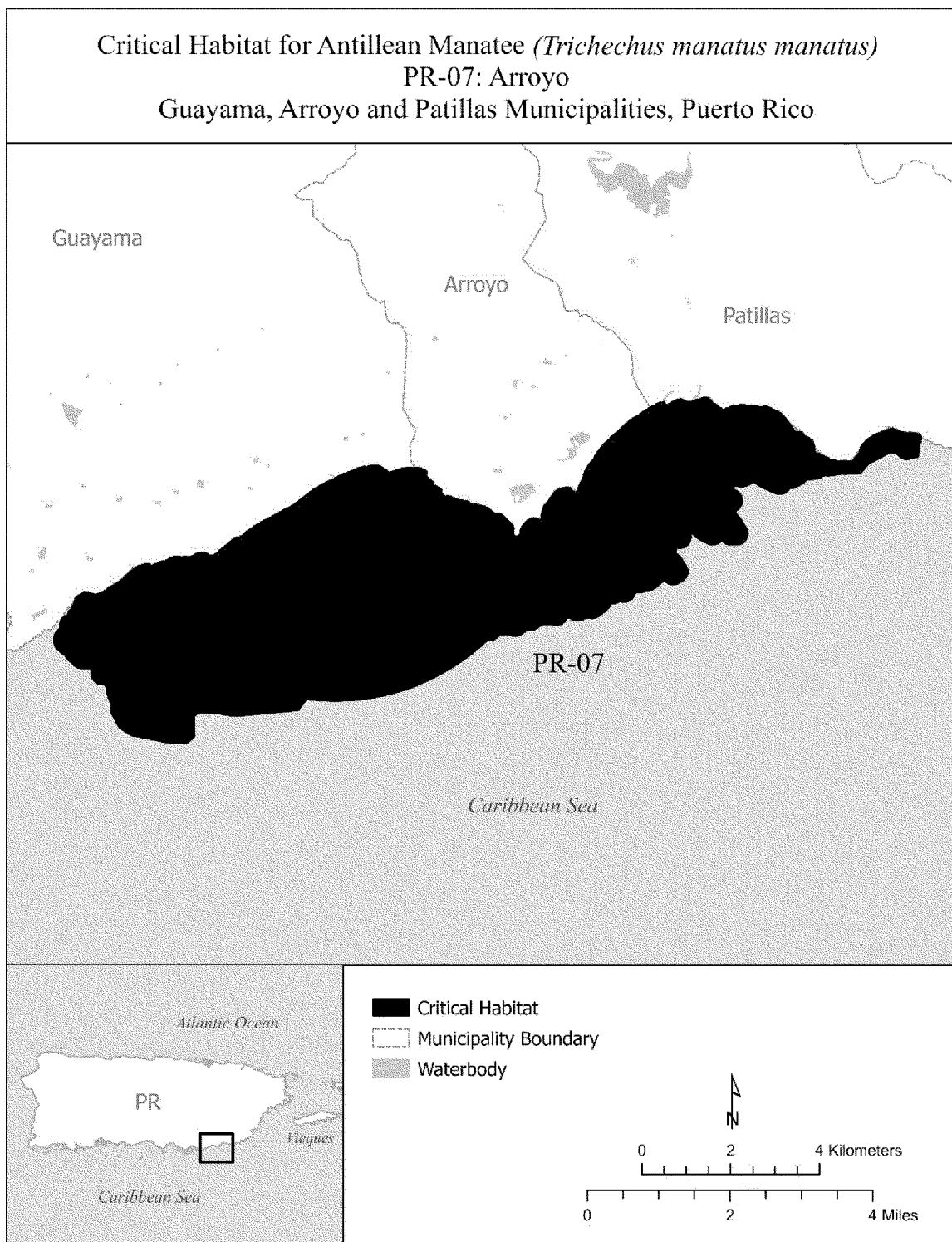
(i) Unit PR-07 consists of 15,001 ac (6,071 ha) of marine waters below the MHW line along the coastline of the Municipalities of Patillas, Arroyo, and Guayama. This unit starts approximately 738 ft (225 m) east of the mouth of the Jacoboa River; continues

west along the coastline towards Punta Viento, Puerto Patillas, Punta Figuras, and Puerto Arroyo; and ends approximately 0.9 mi (1.5 km) west of Punta Ola Grande. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-

m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership and overlaps with a portion of the Marine Extent of the Guayama Reef Nature Reserve.

(ii) Map of Unit PR-07 follows:

Figure 8 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (12)(ii)



(13) Unit PR–08: Santa Isabela to Jobos Bay; Juana Díaz, Santa Isabel, Salinas, and Guayama Municipalities, Puerto Rico.

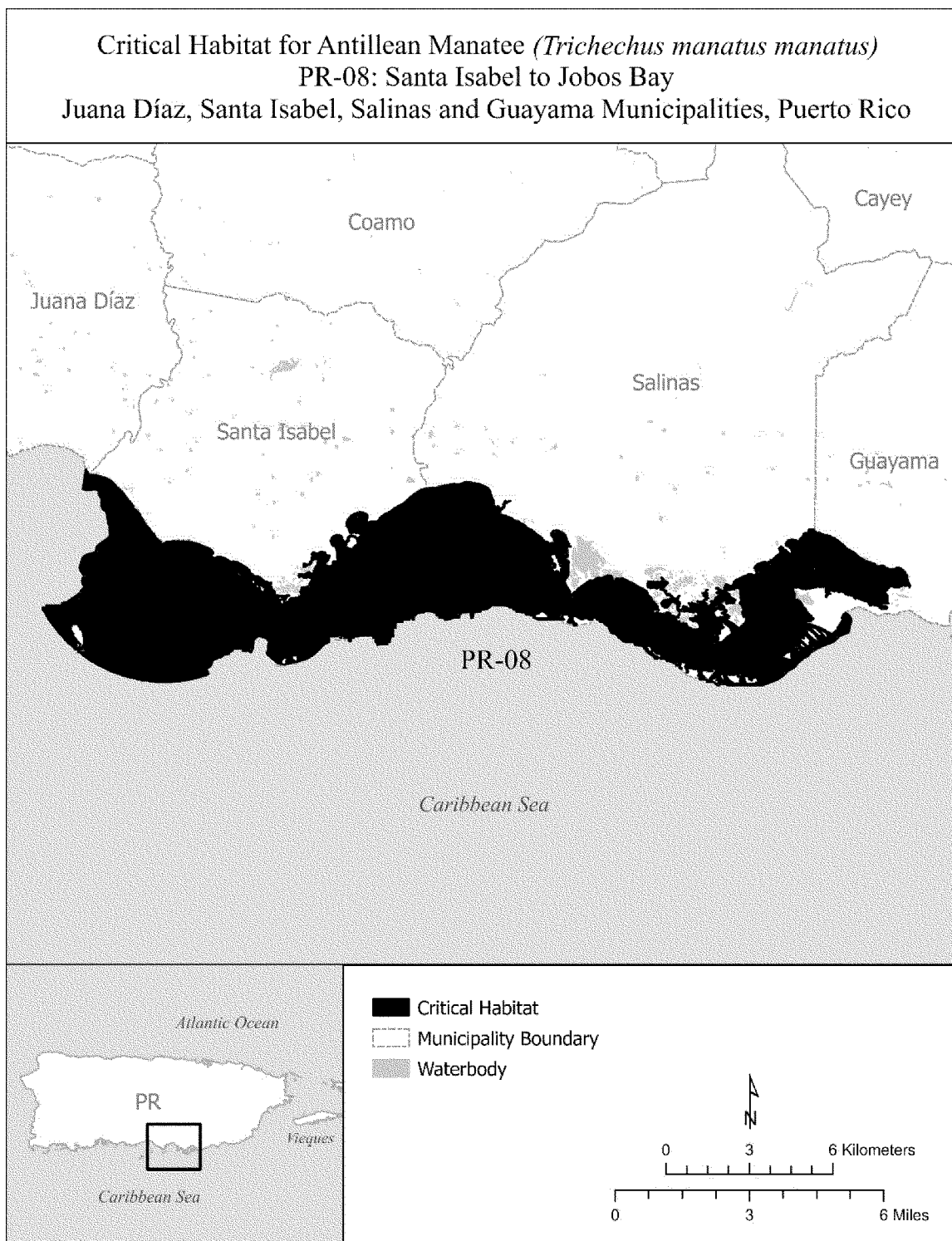
(i) Unit PR–08 consists of 24,360 ac (9,858 ha) of marine waters below the MHW line along the coastline of the Municipalities of Juana Díaz, Santa Isabel, Salinas, and Guayama. This unit starts approximately 1,213 ft (370 m) west of Descalabrado River and continues east along the coastline

towards Punta Cayito, Punta Petrona, Bahía de Rincón, and Punta Arenas, including the waters within Mar Negro and around Bahía de Jobos towards Punta Pozuelo. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to

shore. The entire unit is within Commonwealth ownership and overlaps with portions of the Jobos Bay National Estuarine Research Reserve and the Marine Extents of the Punta Petrona Nature Reserve and Isla Caja de Muertos Nature Reserve.

(ii) Map of Unit PR–08 follows:

Figure 9 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (13)(ii)



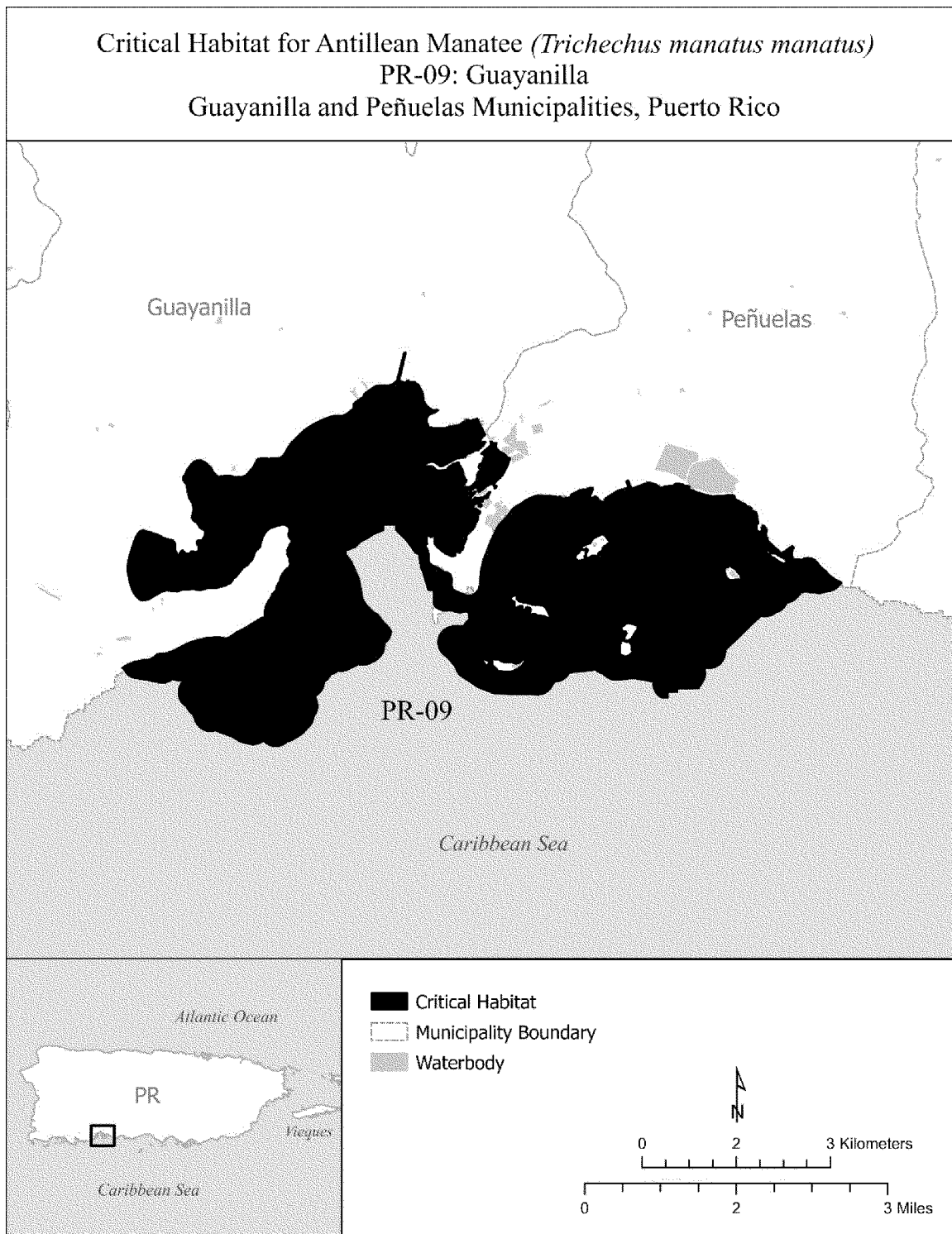
(14) Unit PR-09: Guayanilla; Guayanilla and Peñuelas Municipalities, Puerto Rico.

(i) Unit PR-09 consists of 7,404 ac (2,996 ha) of marine waters below the MHW line along the coastline of the Municipalities of Peñuelas and Guayanilla. This unit starts along the coastline of Peñon de Ponce; continues

west towards the Tallaboa River, Bahía Tallaboa, Punta Guayanilla, and Punta Pepillo, and around Bahía de Guayanilla towards Punta Verraco; and ends approximately 984 ft (300 m) west of Cerro Toro in Punta Ventana beach. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the

unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership.

(ii) Map of Unit PR-09 follows: Figure 10 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (14)(ii)



(15) Unit PR-10: Guánica; Guánica Municipality, Puerto Rico.

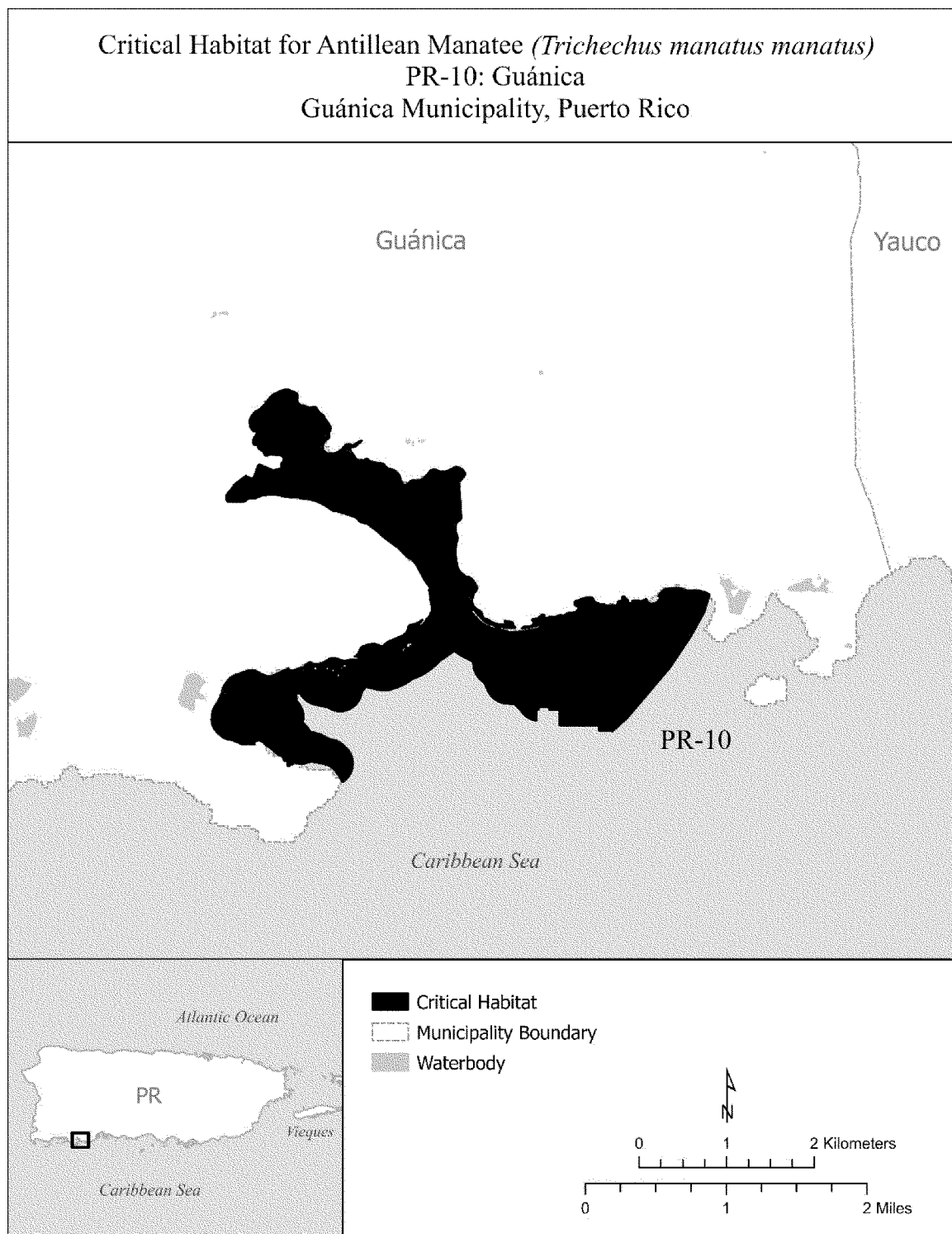
(i) Unit PR-10 consists of 1,798 ac (728 ha) of marine waters below the MHW line along the coastline of the Municipality of Guánica. This unit starts approximately 1,312 ft (400 m) west of Punta Jacinto; continues along the coastline towards and around

Guánica Bay, by Punta Meseta, Punta Pera, Punta Pescadores, and Ensenada Las Pargas; and ends in Punta Brea. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest

to shore. The entire unit is within Commonwealth ownership and overlaps with a portion of the Marine Extent of the Guánica Commonwealth Forest.

(ii) Map of Unit PR-10 follows:

Figure 11 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (15)(ii)



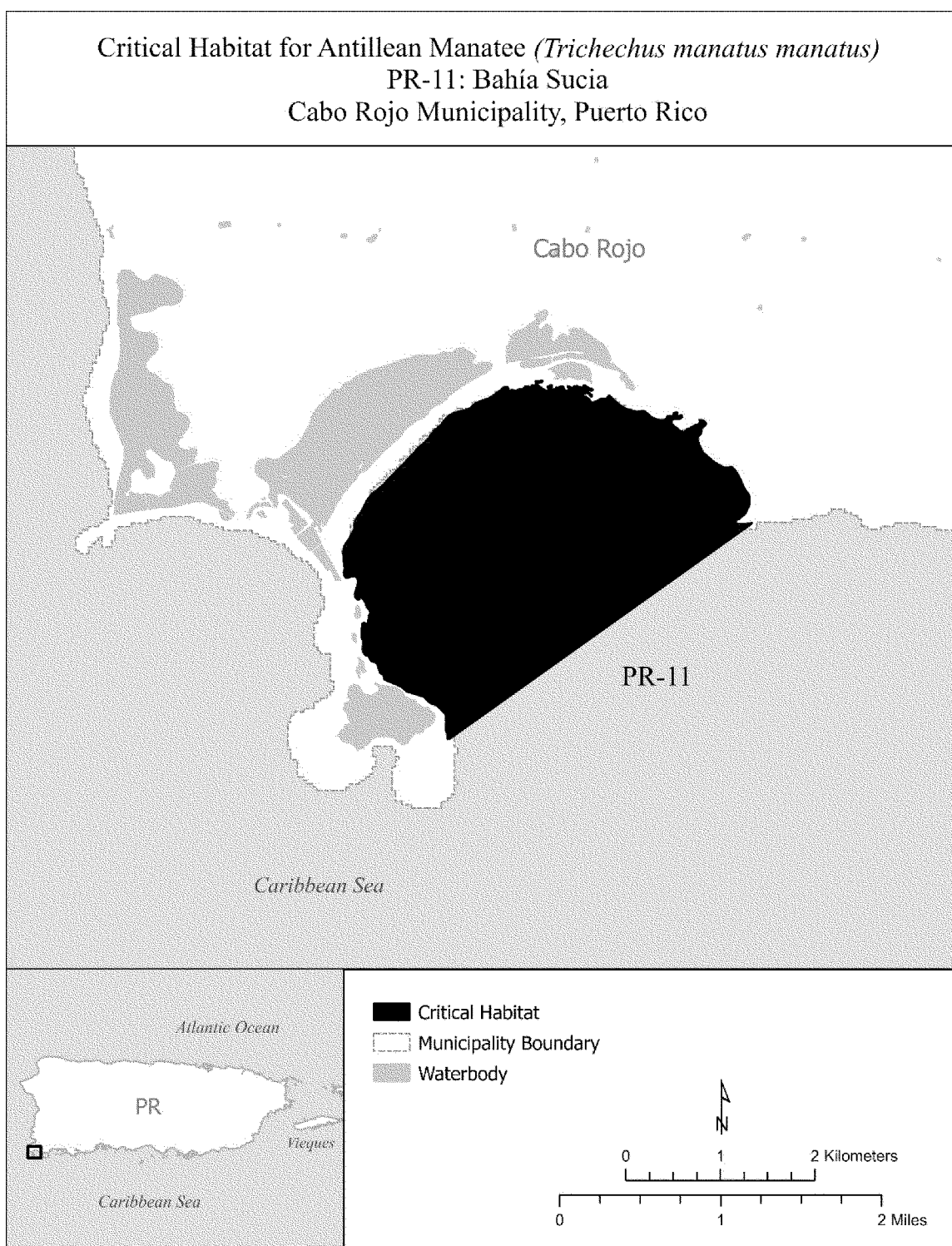
(16) Unit PR-11: Bahía Sucia; Cabo Rojo Municipality, Puerto Rico.

(i) Unit PR-11 consists of 1,732 ac (697 ha) of marine waters below the MHW line within Bahía Sucia along the coastline of the Municipality of Cabo

Rojo, Puerto Rico. Bahía Sucia extends from Punta Molino on the east and approximately 2 mi (3 km) across to the southwest towards Cabo Rojo. The entire unit is within Commonwealth ownership and overlaps with the

Marine Extent of the Boquerón Commonwealth Forest.

(ii) Map of Unit PR-11 follows: Figure 12 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (16)(ii)



(17) Unit PR-12: Boquerón; Cabo Rojo Municipality, Puerto Rico.

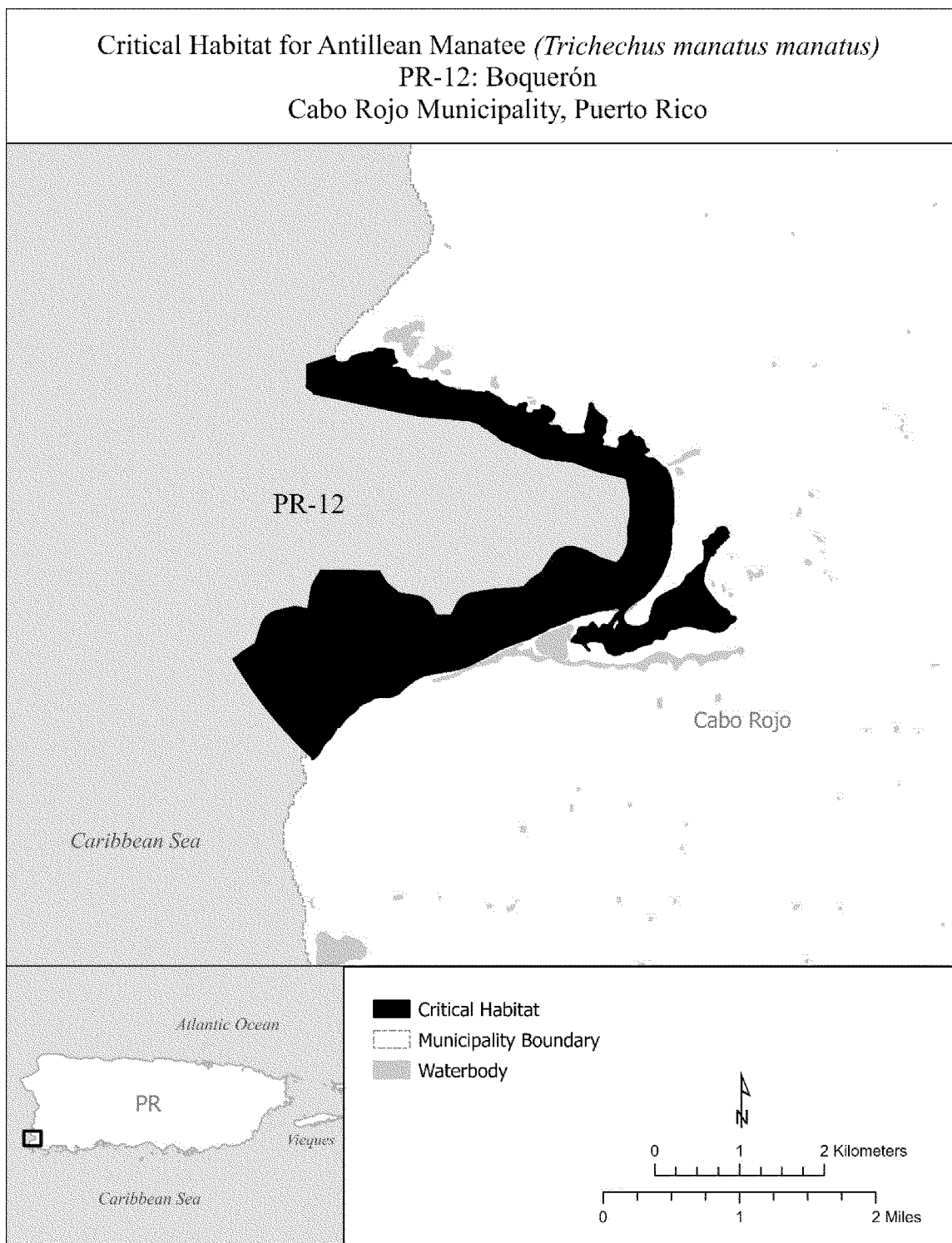
(i) Unit PR-12 consists of 1,989 ac (805 ha) of marine waters below the MHW line within Bahía de Boquerón along the coastline of the Municipality of Cabo Rojo. This unit extends from approximately 394 ft (120 m) east of Punta Melones along the coastline of

Bahía de Boquerón, including the waters inside Caño Boquerón, and towards Punta Guaniquilla to the north. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to

the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership.

(ii) Map of Unit PR-12 follows:

Figure 13 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (17)(ii)



(18) Unit PR-13: Mayagüez; Cabo Rojo and Mayagüez Municipalities, Puerto Rico.

(i) Unit PR-13 consists of 7,949 ac (3,217 ha) of marine waters below the MHW line along the coastline of the Municipality of Cabo Rojo and a small portion of the Municipality of Mayagüez. This unit starts

approximately 0.9 mi (1.5 km) south of Punta Arenas; continues north along the coastline of Bahía Bramadero and Punta Guanajibo; and ends approximately 1,640 ft (500 m) north of the mouth of the Guanajibo River. The offshore boundary of this unit extends approximately 820 ft (250 m) from the outer edge of seagrass beds within the

unit, 1,640 ft (500 m) from shore if no seagrass was mapped, or to the 49-ft (15-m) bathymetry line, whichever is closest to shore. The entire unit is within Commonwealth ownership.

(ii) Map of Unit PR-13 follows: Figure 14 to Antillean Manatee (*Trichechus manatus manatus*) paragraph (18)(ii)

**BILLING CODE 4333-15-C**

Florida Manatee (*Trichechus manatus latirostris*)

(1) Critical habitat units are depicted for Brevard, Broward, Charlotte, Citrus, Collier, Dixie, Gilchrist, Hendry, Hernando, Hillsborough, Indian River, Lake, Lee, Levy, Manatee, Marion, Martin, Miami-Dade, Monroe, Palm

Beach, Pasco, Pinellas, Putnam, Sarasota, Seminole, St. Lucie, Volusia, and Wakulla Counties in the State of Florida on the maps in this entry.

(2) Within these areas, the physical or biological features essential to the conservation of the Florida manatee consist of the following components:

(i) Areas of water warmed by natural processes (e.g., spring discharges, passive thermal basins) that have either:

(A) Reliable thermal quality throughout the winter consisting of water temperatures that stay at or above:

(1) 72 degrees Fahrenheit (°F) (22 degrees Celsius (°C)) during mild weather,

(2) 68 °F (20 °C) during cold weather, and

(3) 64 °F (18 °C) during severe cold weather; or

(B) Established manatee use throughout the winter each year.

(ii) Areas supporting submerged, emergent, or floating aquatic vegetation within 18.6 miles (30 kilometers) of:

(A) The natural warm-water sources described in paragraph (2)(i) of this entry; or

(B) Other established winter manatee aggregation areas (*e.g.*, power plants with established manatee use).

(3) Critical habitat includes waters up to the ordinary high-water line. Critical habitat does not include areas of dry land such as small islands or rock

outcrops or federally maintained navigational channels.

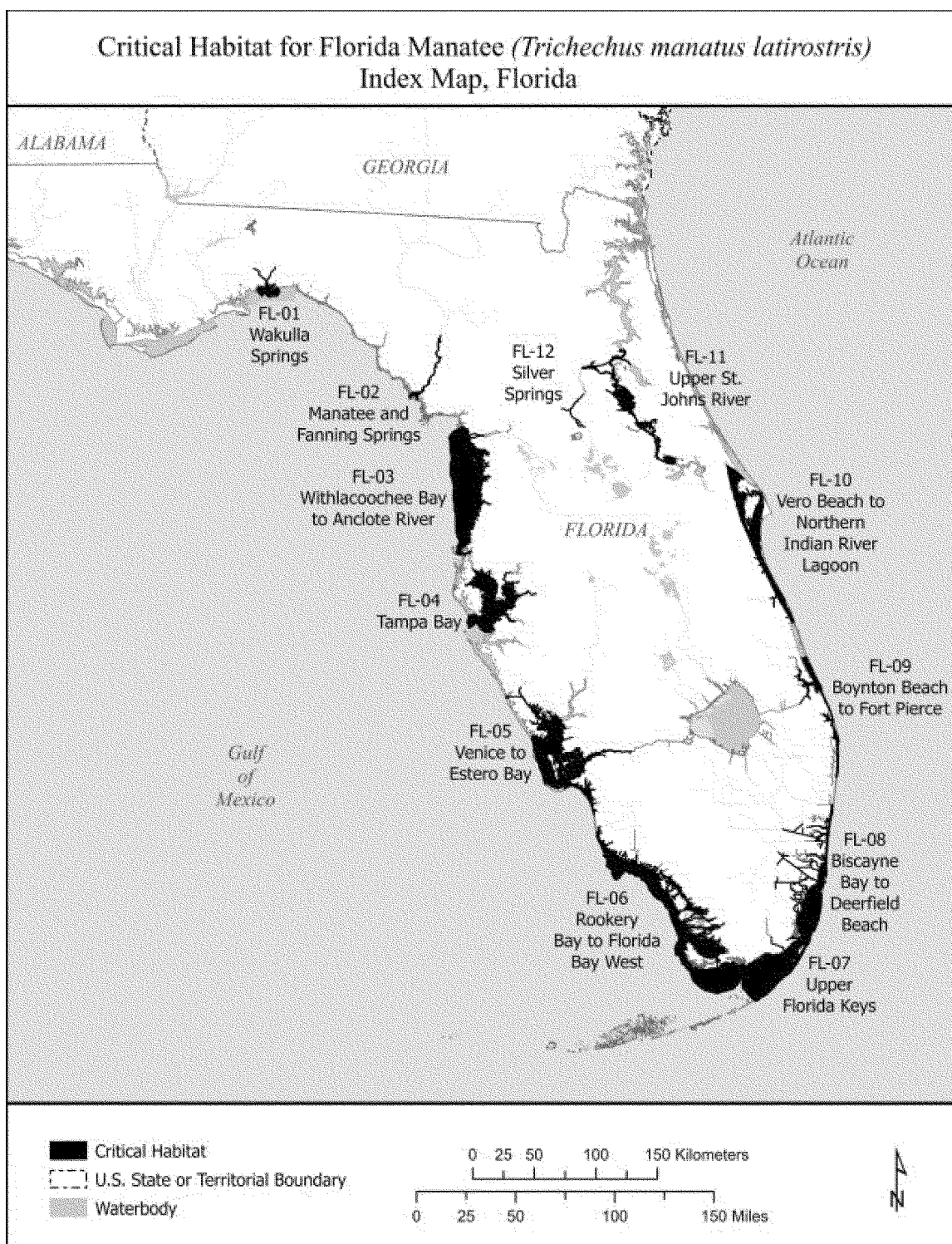
(4) Data layers defining map units were created using Esri ArcGIS mapping software along with various spatial data layers provided by multiple State and regional sources as available (*e.g.*, published data, unpublished reports, databases, and data maintained by the Florida Fish and Wildlife Conservation Commission, Florida's Water Management Districts, and the National Oceanographic and Atmospheric Administration across the range of the subspecies). The projection used in mapping and calculating distances and locations was Albers Conical Equal Area (Florida Geographic Data Library), North American Datum of 1983 High Accuracy

Reference Network. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at <https://www.regulations.gov> at Docket No. FWS-R4-ES-2024-0073 and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Index map follows:

Figure 1 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (5)

BILLING CODE 4333-15-P



(6) Unit FL-01: Wakulla Springs; Wakulla County, Florida.

(i) Unit FL-01 consists of 22,593 acres (ac) (9,143 hectares (ha)) of springs, rivers, and open water along the Gulf of Mexico in Wakulla County, Florida. The unit extends from Wakulla Springs in Edward Ball Wakulla Springs State Park down the Wakulla River out to the Gulf of Mexico, where it fans out to

approximately 5 miles (mi) (8 kilometers (km)) east and west. The unit also extends up the St. Marks River approximately 9 river mi (14.5 km) from the confluence of the Wakulla and St. Marks Rivers. The unit includes all inshore, manatee-accessible waters below the mean high water (MHW) line within approximately 18.6 mi (30 km) of Wakulla Springs. Offshore, the unit

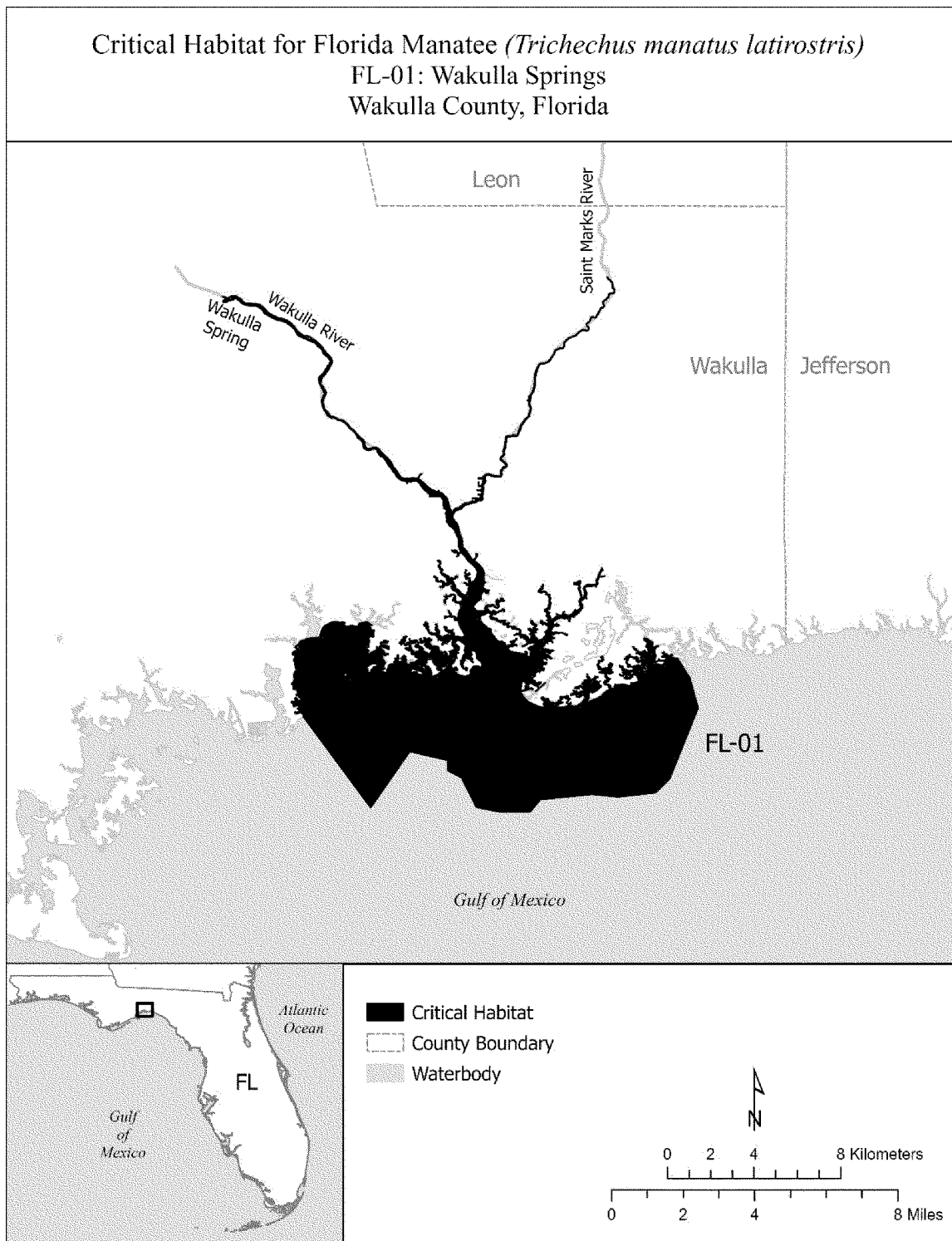
extends to either 18.6 mi (30 km) from Wakulla Springs or the outer extent of seagrass beds in the Gulf of Mexico. Areas within this unit include approximately 936 ac (379 ha) in Federal ownership, 21,598 ac (8,740 ha) in State ownership, 1 ac (less than 1 ha) in local government ownership, and 58 ac (23 ha) in private/other ownership. Federally owned lands in this unit

include St. Marks National Wildlife Refuge (NWR), and State-owned lands include Edward Ball Wakulla Springs

and San Marcos de Apalache Historic State Parks.

(ii) Map of Unit FL-01 follows:

Figure 2 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (6)(ii)



(7) Unit FL-02: Manatee and Fanning Springs; Dixie, Levy, and Gilchrist Counties, Florida.

(i) Unit FL-02 consists of 4,452 ac (1,802 ha) of springs and river in the Big

Bend of the Gulf Coast in Dixie, Levy, and Gilchrist Counties, Florida. The unit extends from approximately 18.6 mi (30 km) north of Fanning Springs near Log Landing Conservation Area

downstream to the mouth of the Suwannee River at the Gulf of Mexico. The unit includes manatee-accessible waters below the MHW line within approximately 18.6 mi (30 km) of

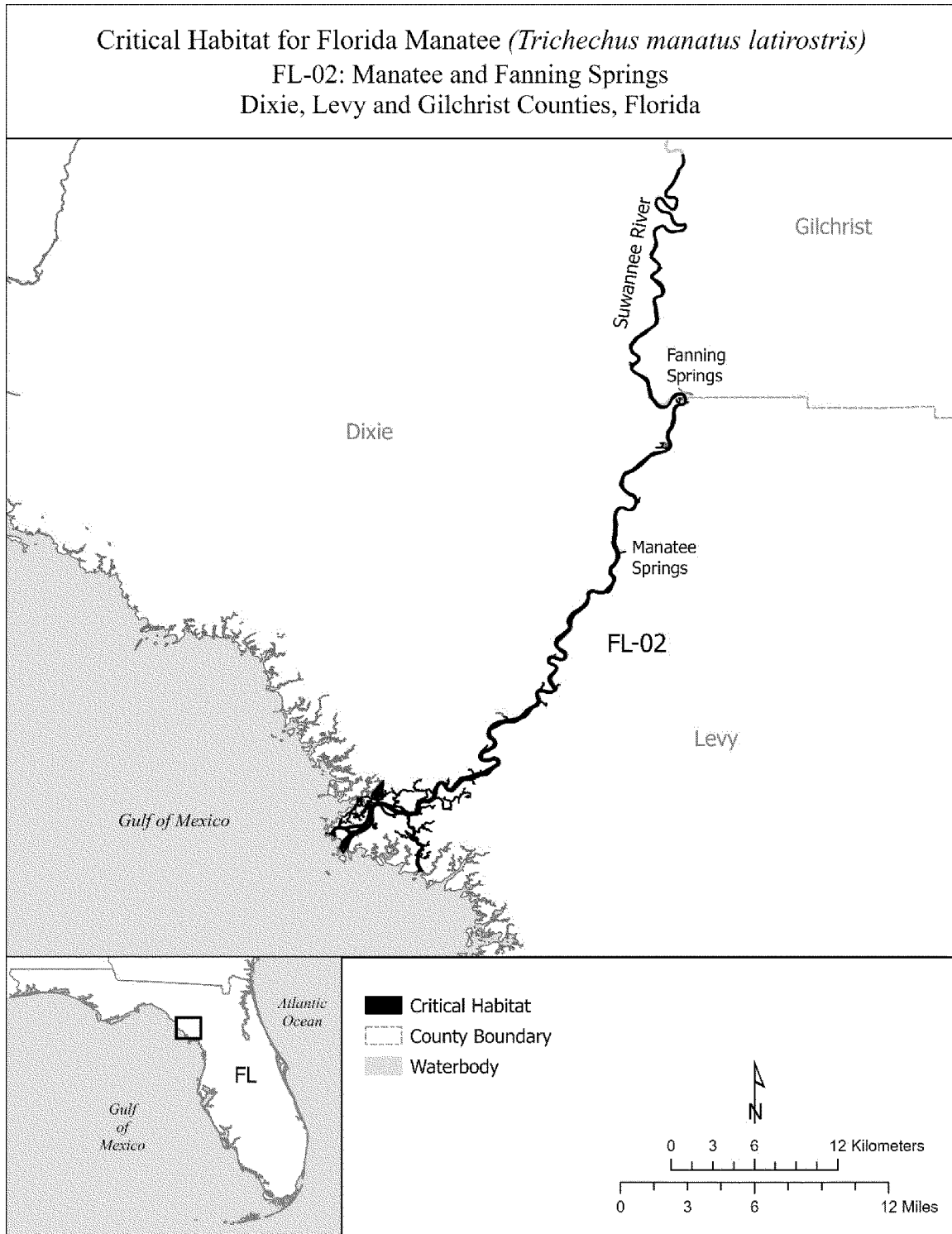
Fanning and Manatee Springs. Areas within this unit include approximately 224 ac (91 ha) in Federal ownership, 4,157 ac (1,682 ha) in State ownership, 12 ac (5 ha) in local government ownership, and 59 ac (24 ha) in private/

other ownership. Federally owned lands in this unit include Lower Suwannee NWR, and State-owned lands include Manatee Springs and Fanning Springs State Parks and Suwannee River Water

Management District (WMD) Conservation Areas.

(ii) Map of Unit FL-02 follows:

Figure 3 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (7)(ii)



(8) Unit FL-03: Withlacoochee Bay to Anclote River; Levy, Citrus, Hernando, Pasco, and Pinellas Counties, Florida.

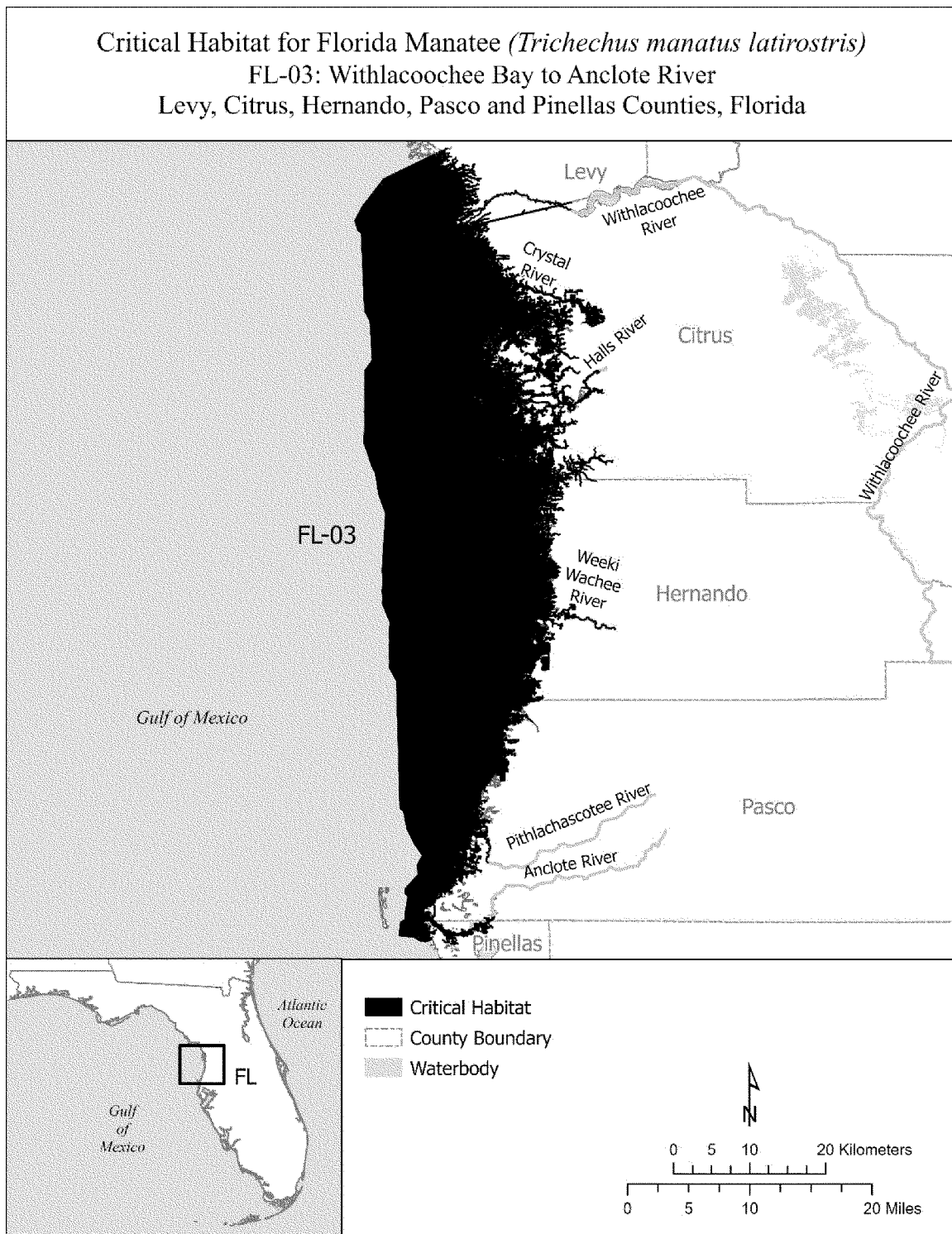
(i) Unit FL-03 consists of 364,584 ac (147,542 ha) of springs, rivers, and open water along the Gulf of Mexico in Levy, Citrus, Hernando, Pasco, and Pinellas Counties, Florida. The unit extends from approximately 6 mi (9.7 km) north of the mouth of the Withlacoochee River to Howard Beach Park, which is approximately 1.5 mi (2.4 km) south of the mouth of the Anclote River. The unit includes all inshore, manatee-

accessible waters below the MHW line within approximately 18.6 mi (30 km) of the Crystal River Springs Complex, Homosassa Springs, the Chassahowitzka Springs Group, the Weeki Wachee Spring Complex, and Cow Creek Spring. Offshore, the unit extends to either 18.6 mi (30 km) from the springs or to the outer extent of seagrass beds in the Gulf of Mexico. Areas within this unit include approximately 21,131 ac (8,551 ha) in Federal ownership, 335,064 ac (135,596 ha) in State ownership, 1,670 ac (676 ha) in local government

ownership, and 6,716 ac (2,719 ha) in private/other ownership. Federally owned lands in this unit include Crystal River and Chassahowitzka NWRs; State-owned lands in this unit include Anclote Key Preserve State Park, Marjorie Harris Carr Cross Florida Greenway State Recreation and Conservation Area, and Withlacoochee State Forest.

(ii) Map of Unit FL-03 follows:

Figure 4 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (8)(ii)



(9) Unit FL-04: Tampa Bay; Pinellas, Hillsborough, and Manatee Counties, Florida.

(i) Unit FL-04 consists of 181,015 ac (73,254 ha) of Tampa Bay and the springs, rivers, and canals surrounding the bay in Pinellas, Hillsborough, and Manatee Counties, Florida. The unit includes all inshore waters of Tampa Bay east of the Skyway Bridge on

Interstate 275 and inshore waters from Fort De Soto Park to the Pinellas Bayway (State Road 682). The unit includes manatee-accessible waters below the MHW line within approximately 18.6 mi (30 km) from the established winter manatee aggregation areas near Duke Energy's Bartow Power Plant, Tampa Electric Company's Bayside Power Plant, and Tampa

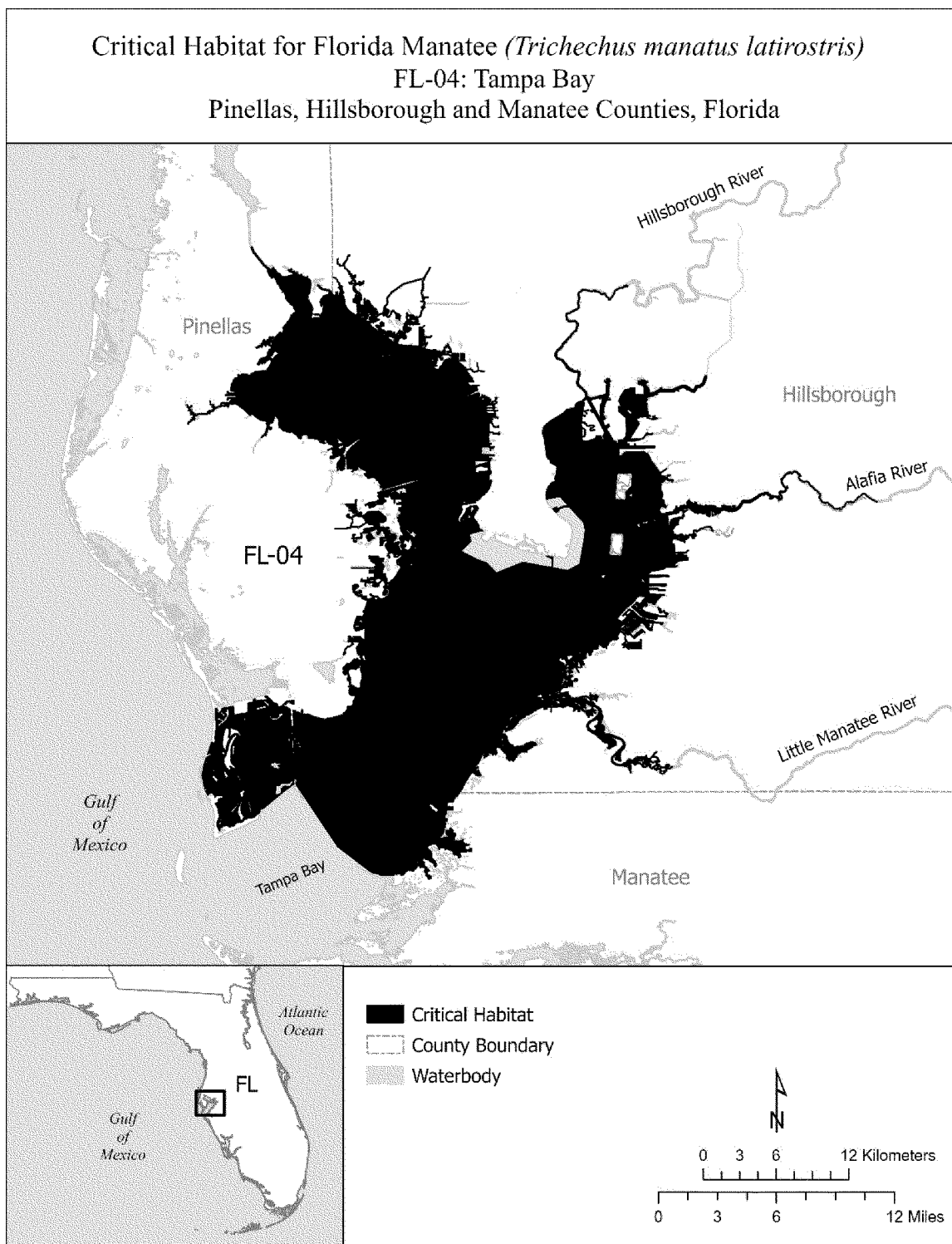
Electric Company's Big Bend Station. Areas within this unit include approximately 682 ac (276 ha) in Federal ownership, 68,347 ac (27,659 ha) in State ownership, 108,805 ac (44,032 ha) in local government ownership, and 3,181 ac (1,287 ha) in private/other ownership. Federally owned lands in this unit include Pinellas NWR; State-owned lands in this

unit include Cockroach Bay Preserve, Terra Ceia Preserve, Little Manatee

River, and Skyway Fishing Pier State Parks.

(ii) Map of Unit FL-04 follows:

Figure 5 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (9)(ii)



(10) Unit FL-05: Venice to Estero Bay; Sarasota, Charlotte, Lee, Hendry, and Collier Counties, Florida.

(i) Unit FL-05 consists of 219,217 ac (88,714 ha) of Charlotte Harbor,

Gasparilla Sound, Matlacha Pass, and Estero Bay, as well as the rivers, canals, and springs surrounding them, in Sarasota, Charlotte, Lee, Collier, and Hendry Counties, Florida. The unit

includes inshore waters from the Boca Grande Causeway south to Vanderbilt Beach Road. From Charlotte Harbor, the unit extends up the Myakka River, then down Curry Creek to the Venice Inlet.

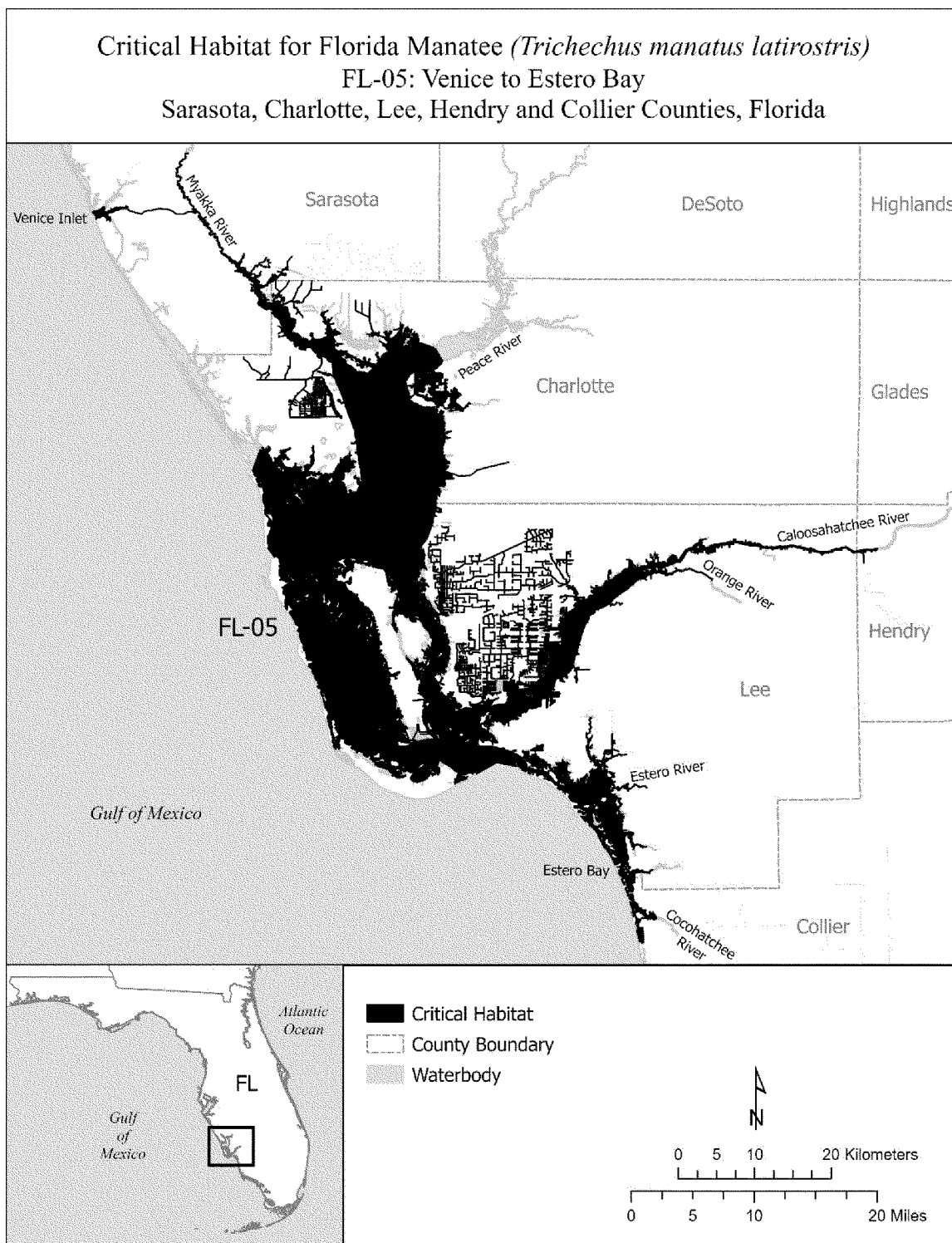
The unit does not include the Peace River east of the Barron Collier Bridge on State Road 41. The unit includes the Caloosahatchee River from its mouth near Cape Coral to near the Caloosahatchee and C-43 Basin Storage Reservoir. The unit includes manatee-accessible waters below the MHW line within approximately 18.6 mi (30 km) from the warm-water sites of Warm Mineral Springs, Matlacha Isles, North Cape Coral Canal, and Ten Mile Canal

Borrow Pit, and the established winter manatee aggregation area near Florida Power and Light's Fort Myers Power Plant. Areas within this unit include approximately 2,048 ac (829 ha) in Federal ownership, 191,975 ac (77,690 ha) in State ownership, 16,821 ac (6,807 ha) in local government ownership, and 8,373 ac (3,388 ha) in private/other ownership. Federally owned lands in this unit include Caloosahatchee, Matlacha Pass, Pine Island, Island Bay,

and J.N. Ding Darling NWRs. State-owned lands in this unit include Lovers Key, Charlotte Harbor Preserve, Estero Bay Preserve, Delnor-Wiggins Pass, and Cayo Costa State Parks; Myakka State Forest; Southwest Florida WMD's Deer Prairie Creek Preserve; and the C-43 Basin Storage Reservoir.

(ii) Map of Unit FL-05 follows:

Figure 6 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (10)(ii)



(11) Unit FL-06: Rookery Bay to Florida Bay West; Collier, Monroe, and Miami-Dade Counties, Florida.

(i) Unit FL-06 consists of 450,052 ac (182,130 ha) of inshore and coastal waters from Naples Bay to the western half of Florida Bay in Collier, Monroe, and Miami-Dade Counties, Florida. The unit includes inshore waters of Naples from the Golden Gate Parkway (County

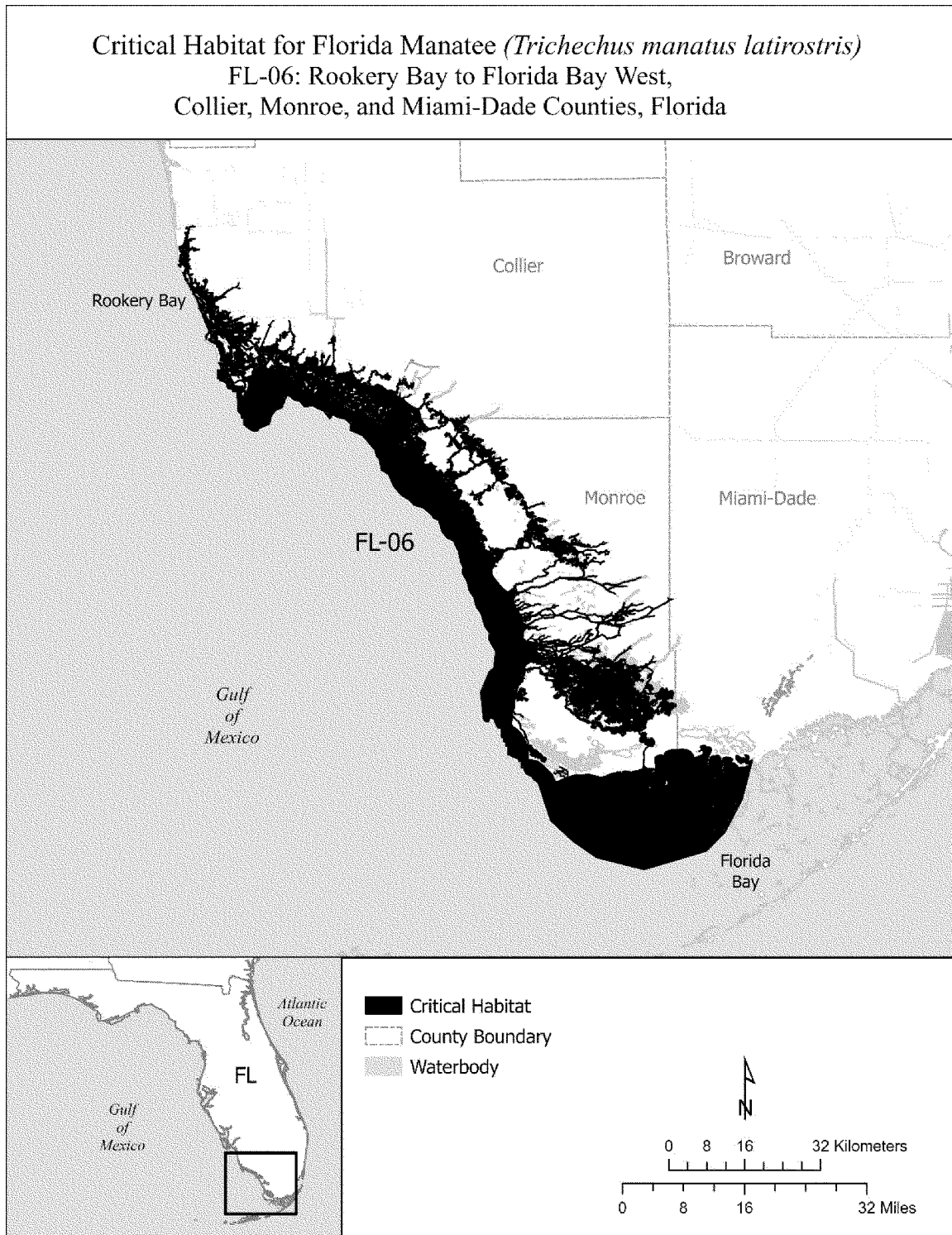
Road 886) bridge over Gordon River to Marco Island. From Ten Thousand Island to Florida Bay, the unit includes inshore waters and offshore waters ranging from 1 to 13 mi (1.6 to 21 km) offshore. The unit includes manatee-accessible waters below the MHW line within approximately 18.6 mi (30 km) from the warm-water sites of Henderson Creek, Marco Island Canals, Port of the

Islands Canals, Port of the Islands Mitigation Site, Wooten's Pond, Big Cypress Preserve Canal, Mud Bay, and the Everglades Complex. Areas within this unit include approximately 343,626 ac (139,061 ha) in Federal ownership, 105,559 ac (42,718 ha) in State ownership, 18 ac (7 ha) in local government ownership, and 849 ac (344 ha) in private/other ownership.

Federally owned lands in this unit include Ten Thousand Island NWR, Everglades National Park, and Big Cypress National Preserve; State-owned

lands in this unit include Collier-Seminole and Fakahatchee Strand Preserve State Parks, and Rookery Bay National Estuarine Research Reserve.

(ii) Map of Unit FL-06 follows:
Figure 7 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (11)(ii)



(12) Unit FL-07: Upper Florida Keys; Miami-Dade and Monroe Counties, Florida.

(i) Unit FL-07 consists of 244,254 ac (98,846 ha) of inshore and coastal waters of the Upper Florida Keys, from Islamorada north to Old Rhodes Key, in

Monroe and Miami-Dade Counties, Florida. The unit includes waters of Eastern Florida Bay to approximately 13 mi (21 km) offshore, inshore waters and

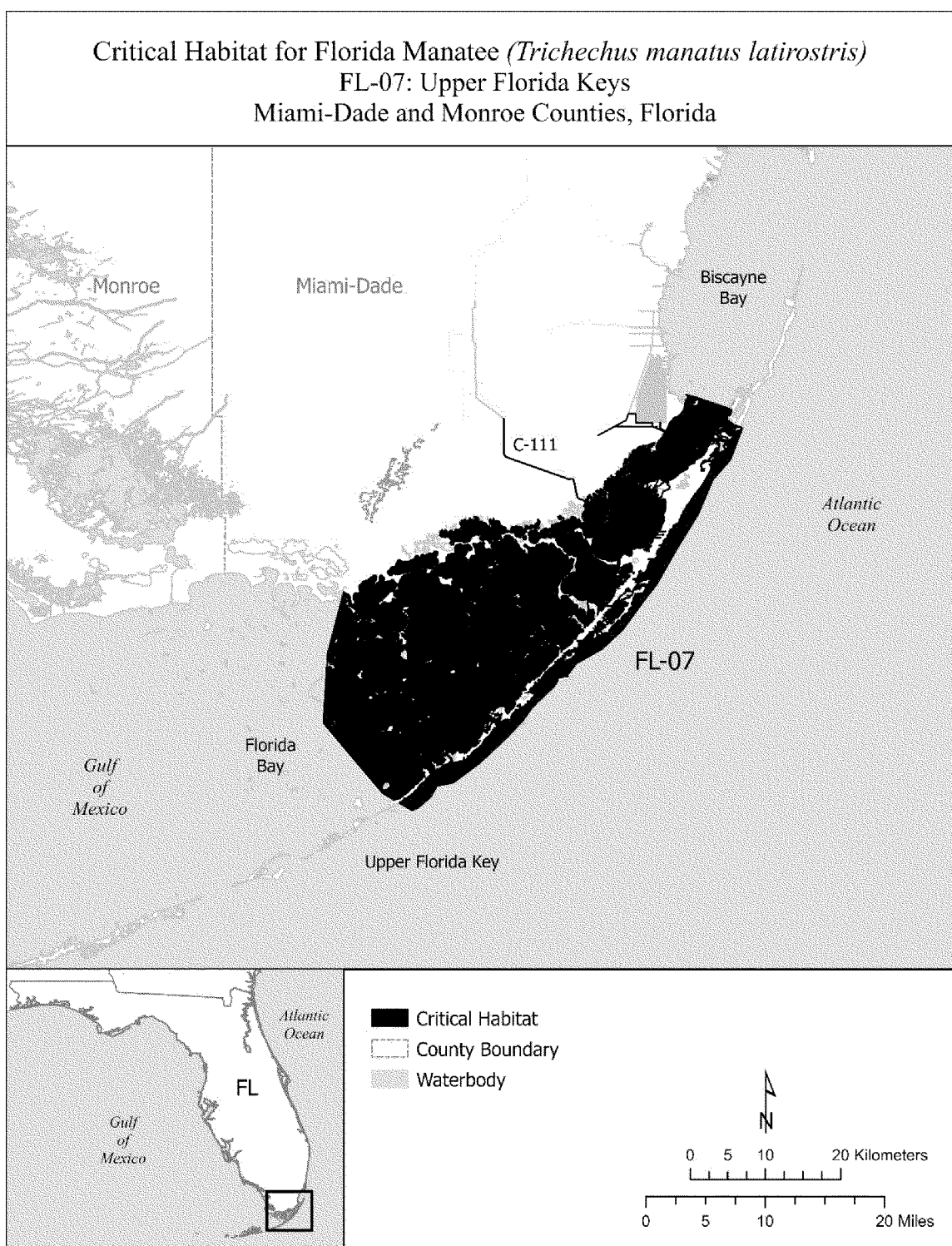
canals of the Keys, and waters of the Atlantic Ocean approximately 0.5 to 1.5 mi (0.8 to 2.4 km) offshore. The unit also extends inland into the Glades Canal approximately 11 mi (17.7 km) and into the Florida Power and Light Everglades Mitigation Bank Canals approximately 7 mi (11 km). The unit includes manatee-accessible waters below the MHW line within approximately 18.6 mi (30 km) from the

warm-water sites of the Upper Keys Canals and Brown Street Canal. Areas within this unit include approximately 161,201 ac (65,236 ha) in Federal ownership, 76,635 ac (31,013 ha) in State ownership, 2,762 ac (1,118 ha) in local government ownership, and 3,656 ac (1,480 ha) in private/other ownership. Federally owned lands in this unit include Crocodile Lake NWR, Everglades National Park, and Biscayne

National Park. State-owned lands in this unit include Lignumvitae Key Botanical, John Pennkamp Coral Reef, Windley Key Fossil Reef Geological, and Dagny Johnson Key Largo Hammock Botanical State Parks, and the Florida Keys Wildlife and Environmental Area.

(ii) Map of Unit FL-07 follows:

Figure 8 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (12)(ii)



(13) Unit FL-08: Biscayne Bay to Deerfield Beach; Miami-Dade, Broward, and Palm Beach Counties, Florida.

(i) Unit FL-08 consists of 146,725 ac (59,378 ha) of inshore waters from Biscayne Bay to Deerfield Beach in Miami-Dade, Broward, and Palm Beach Counties, Florida. The unit includes inshore waters of Biscayne Bay and the intracoastal waterways, rivers, and

canals (up to 24 mi (38.6 km) inland) along the southeastern Florida coast from the southern end of Biscayne National Park to Deerfield Beach. The unit includes manatee-accessible waters below the MHW line within approximately 18.6 mi (30 km) from the warm-water sites of the Coral Gables Waterway, Palmer Lake, and the Little River-S-27 structure, as well as the

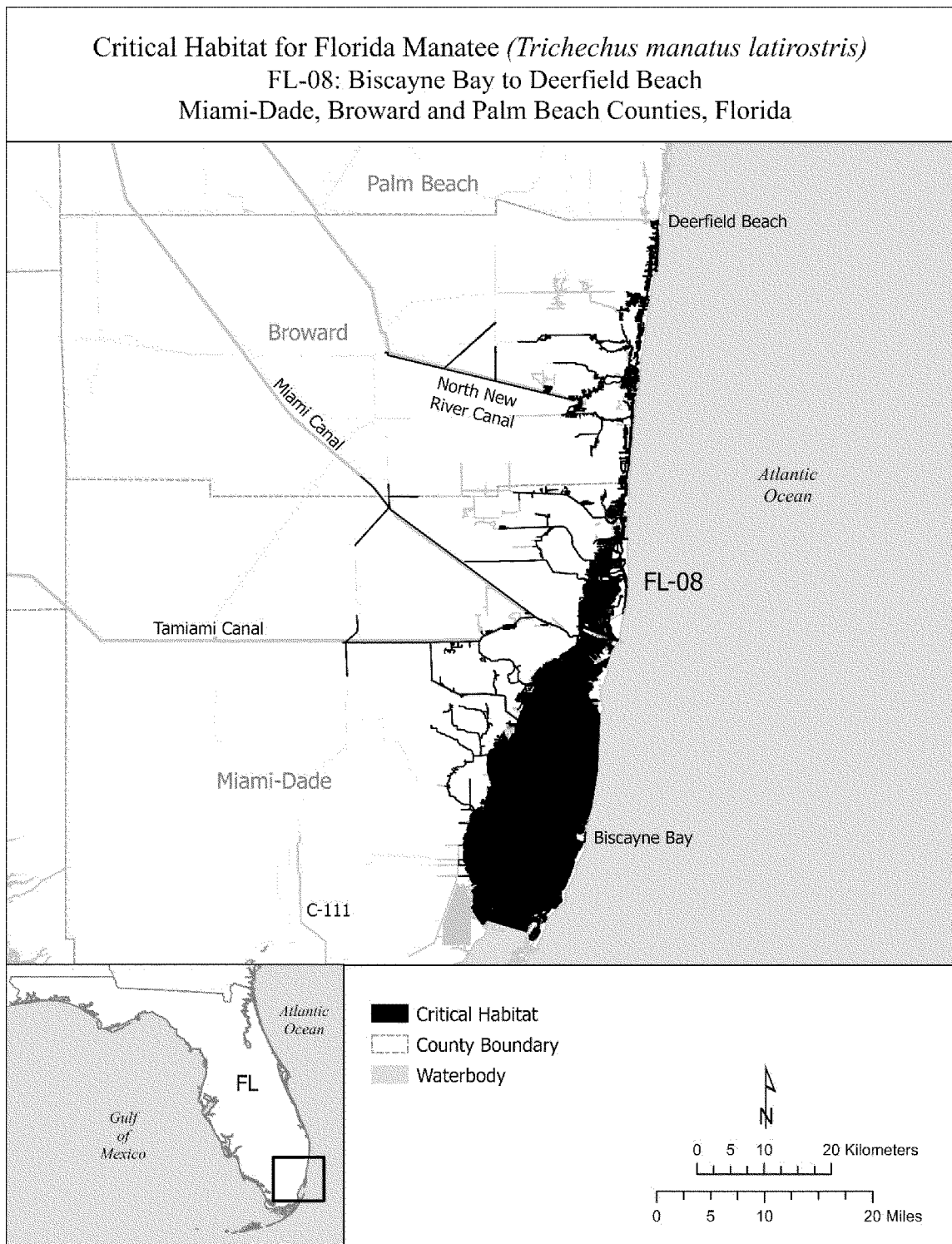
established winter manatee aggregation areas near Florida Power and Light's Dania Beach and Port Everglades Energy Centers. Areas within this unit include approximately 91,404 ac (36,990 ha) in Federal ownership, 46,768 ac (18,926 ha) in State ownership, 5,525 ac (2,236 ha) in local government ownership, and 3,028 ac (1,225 ha) in private/other ownership. Federally owned lands in

this unit include Biscayne National Park. State-owned lands in this unit include Oleta River, Bill Baggs Cape Florida, and Dr. Von D. Mizell-Eula

Johnson State Parks, and the Everglades and Francis S. Taylor Wildlife Management Area.

(ii) Map of Unit FL-08 follows:

Figure 9 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (13)(ii)



(14) Unit FL-09: Boynton Beach to Fort Pierce; Palm Beach, Martin, and St. Lucie Counties, Florida.

(i) Unit FL-09 consists of 37,829 ac (15,309 ha) of inshore waters from approximately 1.3 mi (2 km) south of the Boynton Inlet to approximately 4.7

mi (7.6 km) south of the Fort Pierce Inlet in Palm Beach, Martin, and St. Lucie Counties, Florida. The unit includes inshore waters (up to 18 mi (29 km)

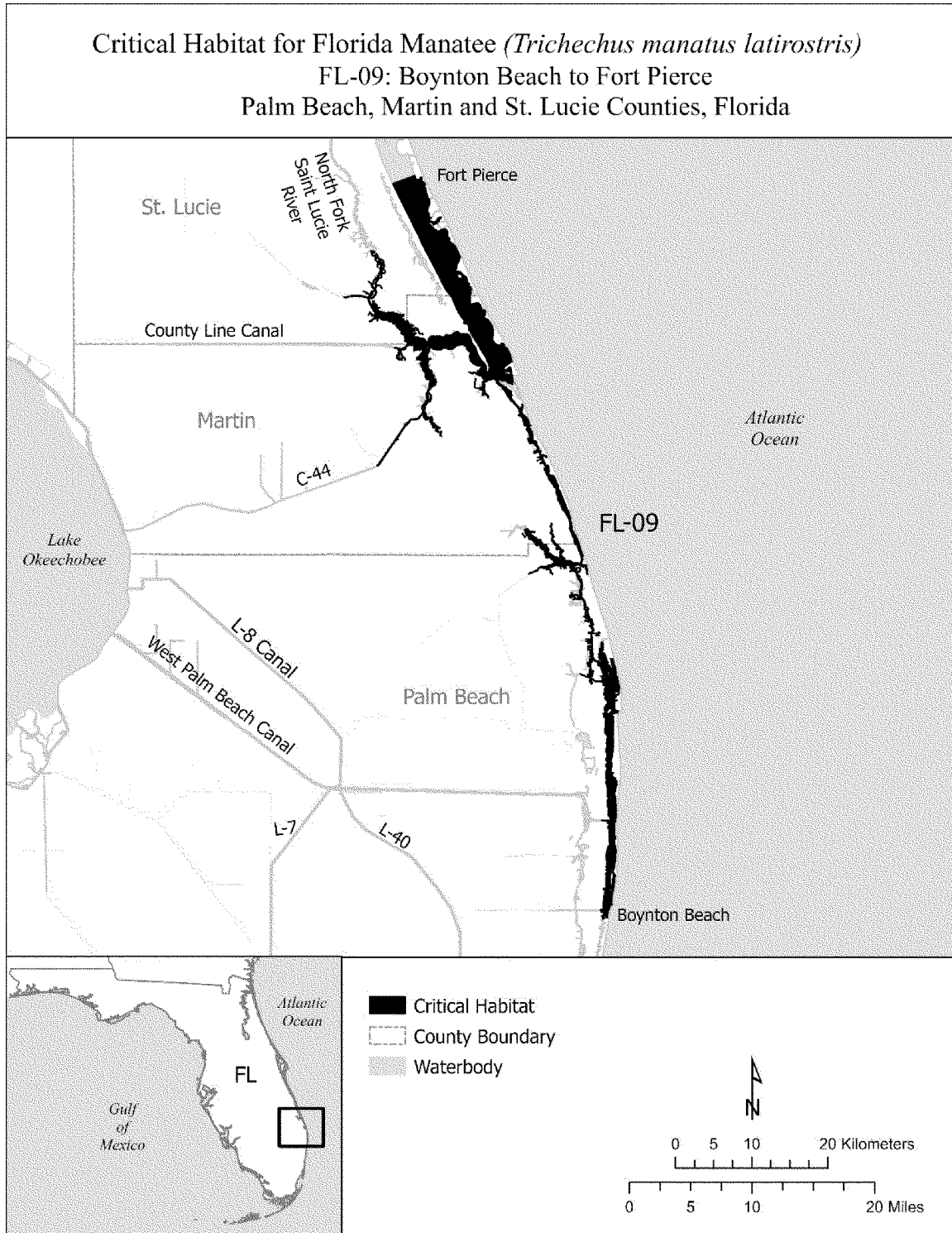
inland) of the intracoastal waterways, rivers, and canals along the eastern Florida coast even with Lake Okeechobee. The unit includes manatee-accessible waters below the MHW line within approximately 18.6 mi (30 km) from the warm-water site of

Willoughby Creek and the established winter manatee aggregation area near Florida Power and Light's Riviera Beach Energy Center. Areas within this unit include approximately 203 ac (82 ha) in Federal ownership, 35,967 ac (14,555 ha) in State ownership, 533 ac (216 ha)

in local government ownership, and 1,126 ac (456 ha) in private/other ownership.

(ii) Map of Unit FL-09 follows:

Figure 10 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (14)(ii)



(15) Unit FL–10: Vero Beach to Northern Indian River Lagoon; Indian River, Brevard, and Volusia Counties, Florida.

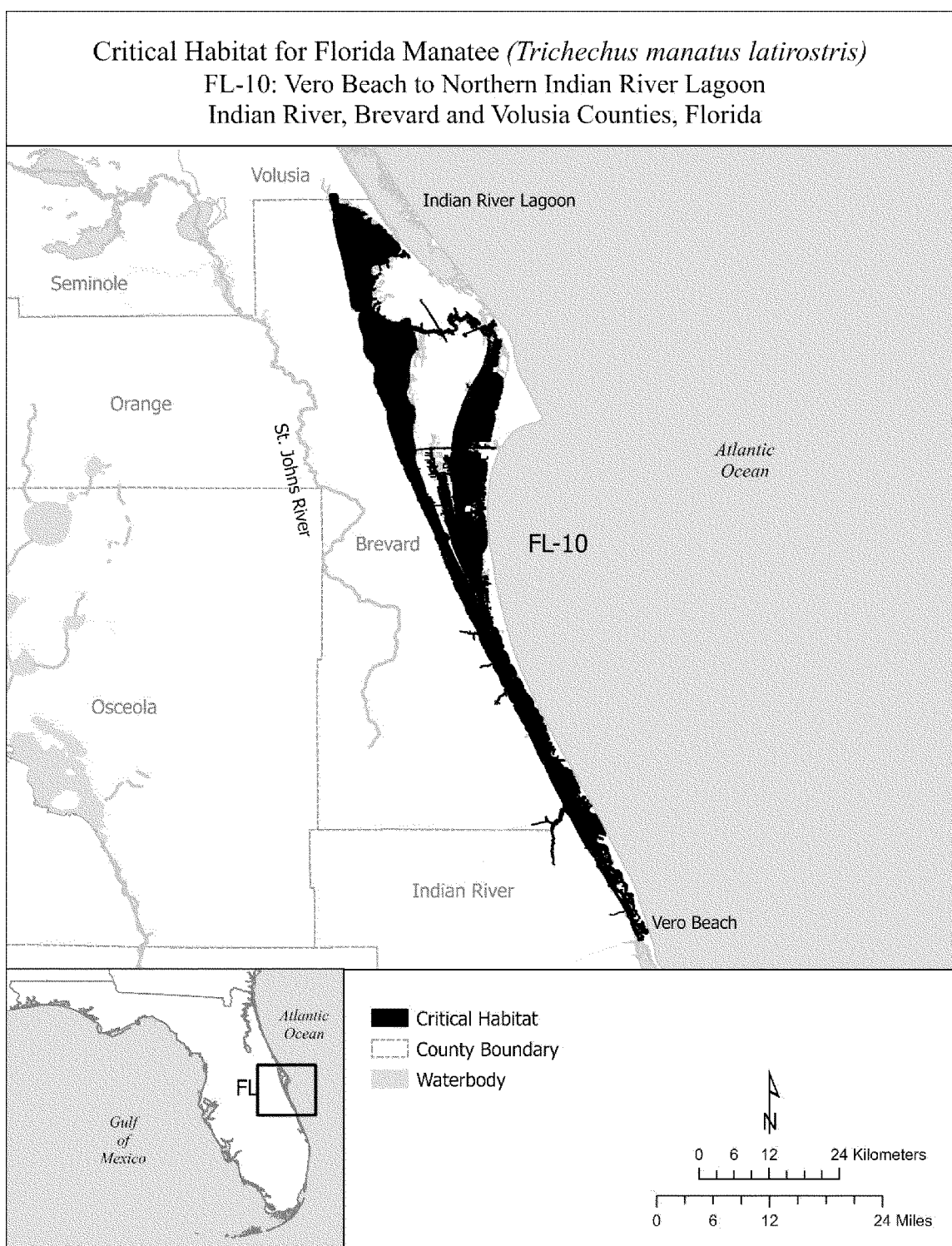
(i) Unit FL–10 consists of 153,588 ac (62,155 ha) of inshore waters from the Merrill P. Barber Bridge (on State Road 60) in Vero Beach to the northern tip of the Indian River Lagoon in Indian River, Brevard, and Volusia Counties, Florida. The unit includes rivers and canals along the Indian River Lagoon and Banana River on the central east coast of Florida. The unit includes manatee-accessible waters below the MHW line

within approximately 18.6 mi (30 km) from the warm-water sites of the Sebastian River (C–54 Canal), DeSoto Canal, Berkeley Canal, and Banana River Marine Service Marina, as well as the established winter manatee aggregation area near Florida Power and Light's Port Canaveral Energy Center. The unit does not extend all the way through the Haulover Canal or include Mosquito Lagoon. Areas within this unit include approximately 33,077 ac (13,386 ha) in Federal ownership, 117,318 ac (47,477 ha) in State ownership, 1,782 ac (721 ha) in local

government ownership, and 1,410 ac (571 ha) in private/other ownership. Federally owned lands in this unit include Merritt Island, Pelican Island, and Archie Carr NWRs; State-owned lands in this unit include Indian River Lagoon Preserve, St. Sebastian River Preserve, and Sebastian Inlet State Parks.

(ii) Map of Unit FL–10 follows:

Figure 11 to Florida Manatee
(*Trichechus manatus latirostris*)
paragraph (15)(ii)



(16) Unit FL-11: Upper St. Johns River; Lake, Seminole, Volusia, Marion, and Putnam Counties, Florida.

(i) Unit FL-11 consists of 79,444 ac (32,150 ha) of springs, rivers, and lakes in the Upper St. Johns, Hontoon Dead, Ziegler Dead, Norris Dead, and Ocklawaha Rivers in Lake, Seminole, Volusia, Marion, and Putnam Counties, Florida. The unit extends from Lake

Monroe north to Memorial Bridge (State Road 100) over the St. Johns River, east to the mouth of Dunns Creek at Crescent Lake, and west to the Rodman Reservoir through the Cross Florida Barge Canal. The unit also includes the section of the Ocklawaha River from the St. Johns River to the Rodman Dam. The unit includes manatee-accessible waters below the MHW line within

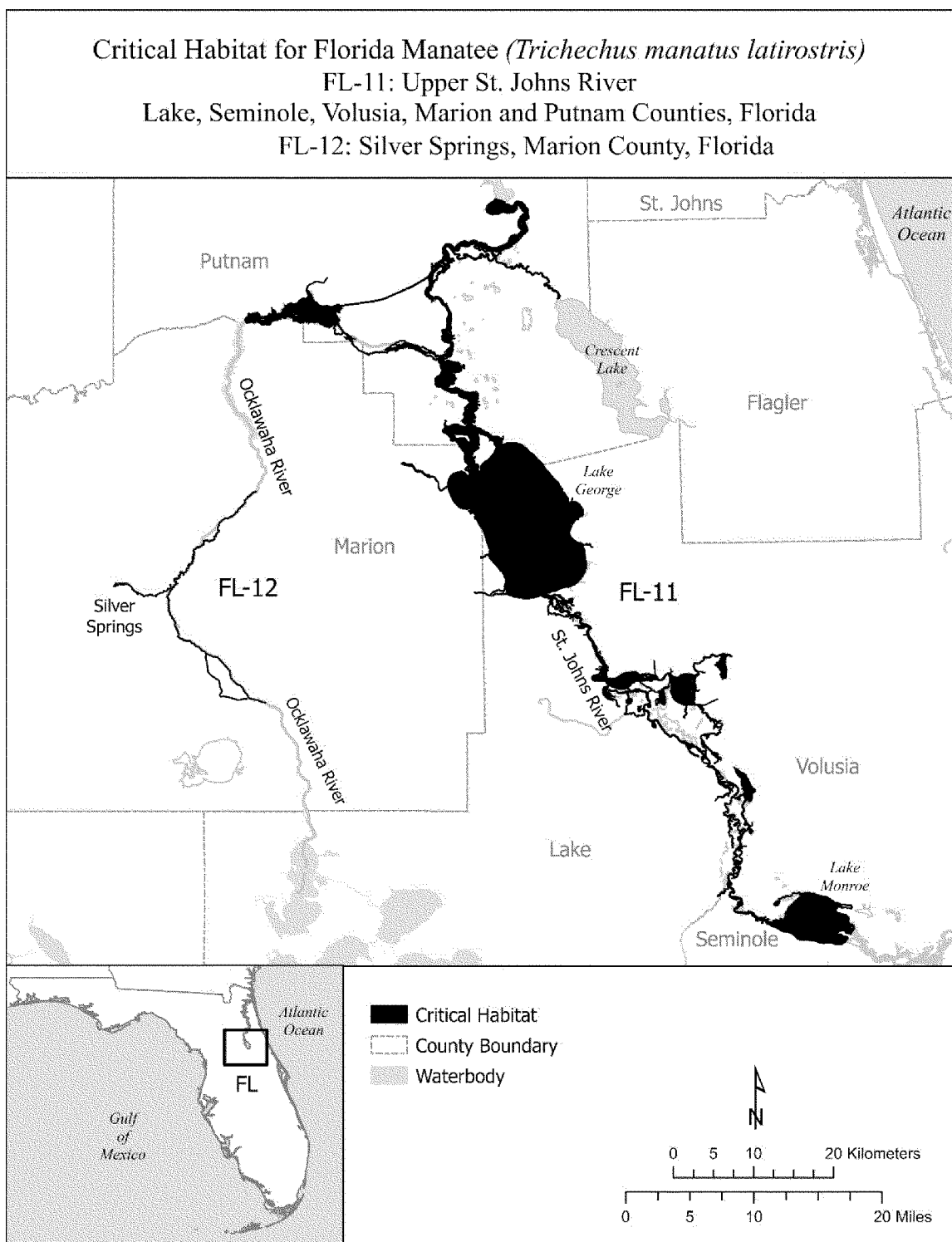
approximately 18.6 mi (30 km) from the warm-water sites of Blue, Silver Glen, Salt, and Welaka Springs. Areas within this unit include approximately 1,815 ac (735 ha) in Federal ownership, 76,984 ac (31,154 ha) in State ownership, 150 ac (61 ha) in local government ownership, and 495 ac (200 ha) in private/other ownership. Federally owned lands in this unit include Lake

Woodruff NWR and Ocala National Forest. State-owned lands in this unit include DeLeon Springs, Blue Spring, Hontoon Island, Ravine Gardens, Lower Wekiva River Preserve, and Dunns

Creek State Parks; Marjorie Harris Carr Cross Florida Greenway State Recreation and Conservation Area; Welaka State Forest; and Lake George State Forest.

(ii) Map of Units FL-11 and FL-12 follows:

Figure 12 to Florida Manatee (*Trichechus manatus latirostris*) paragraph (16)(ii)



(17) Unit FL-12: Silver Springs; Marion County, Florida.

(i) Unit FL-12 consists of 438 ac (177 ha) of springs and rivers in Marion County, Florida. The unit extends from

Silver Springs down Silver River, then north and south into the Ocklawaha River approximately 13 mi (21 km) to

Cedar Creek to the north and Southeast Highway 464C to the south. The unit includes manatee-accessible waters below the MHW line within approximately 18.6 mi (30 km) from the warm-water site of Silver Springs. Areas within this unit include approximately 6 ac (2 ha) in Federal ownership, 417 ac (169 ha) in State ownership, and 15 ac

(6 ha) in private/other ownership. Federally owned lands in this unit include the Ocala National Forest; State-owned lands in this unit include Silver Springs State Park, Marjorie Harris Carr Cross Florida Greenway State Recreation and Conservation Area, and the Ocklawaha Prairie Restoration Area.

(ii) Map of Unit FL-12 is provided at paragraph (16)(ii) of this entry.

* * * * *

Madonna Baucum,
Regulations and Policy Chief, Division of Policy, Economics, Risk Management, and Analytics of the Joint Administrative Operations, U.S. Fish and Wildlife Service.

[FR Doc. 2024-21182 Filed 9-23-24; 8:45 am]

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