

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

RIN 1018-AH80

Endangered and Threatened Wildlife and Plants; Final Rule To Establish Thirteen Additional Manatee Protection Areas in Florida**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Final rule.

SUMMARY: We, the Fish and Wildlife Service (Service), take action to establish 13 additional manatee protection areas in Florida. This action is authorized under the Endangered Species Act of 1973, as amended (ESA), and the Marine Mammal Protection Act of 1972, as amended (MMPA), to further recovery of the Florida manatee (*Trichechus manatus latirostris*) by reducing the number of takings. In evaluating the need for additional manatee protection areas, we considered the needs of the manatee at an ecosystem level with the goal of ensuring that adequate, protected areas are available throughout peninsular Florida to satisfy the biological requirements of the species, with a view toward the manatee's recovery. We are designating manatee protection areas in Brevard, Charlotte, Citrus, De Soto, Hillsborough, Lee, Pinellas, and Sarasota Counties. Four of the sites are manatee sanctuaries, where all waterborne activities are prohibited throughout all or part of the year, with exceptions for adjoining property owners. The remaining nine sites are manatee refuges, in which certain waterborne activities are prohibited or regulated for all or some portion of the year. The previously proposed and emergency-designated South Gandy Navigation Channel Manatee Refuge in Pinellas County has been withdrawn. We also announce the availability of an environmental assessment for this action.

DATES: This rule is effective November 8, 2002.**ADDRESSES:** The complete file for this rule is available for inspection, by appointment, during normal business hours at the Jacksonville Field Office, U.S. Fish and Wildlife Service, 6620 Southpoint Drive, South, Suite 310, Jacksonville, Florida 32216.**FOR FURTHER INFORMATION CONTACT:** David Hankla, Peter Benjamin, or Jim Valade (see **ADDRESSES** section),telephone (904) 232-2580; or visit our Web site at <http://northflorida.fws.gov>.**SUPPLEMENTARY INFORMATION:****Background**

The West Indian manatee is federally listed as an endangered species under the ESA (16 U.S.C. 1531 *et seq.*) (32 FR 4001) and the species is further protected as a depleted stock under the MMPA (16 U.S.C. 1361-1407). Florida manatees, a subspecies of the West Indian manatee (Domning and Hayek, 1986), live in freshwater, brackish, and marine habitats in coastal and inland waterways of the southeastern United States. The majority of the population can be found in Florida waters throughout the year, and nearly all manatees winter in peninsular Florida during the winter months. The manatee is a cold-intolerant species and requires warm water temperatures generally above 20° Celsius (68° Fahrenheit) to survive during periods of cold weather. During the winter months, most manatees rely on warm water from industrial discharges and natural springs for warmth. In warmer months, they expand their range and occasionally are seen as far north as Rhode Island on the Atlantic Coast and as far west as Texas on the Gulf Coast.

Status of the Florida Manatee

Long-term studies, as described below, suggest four relatively distinct regional populations of manatees in Florida—(a) The Northwest Region, consisting of the counties along the Gulf of Mexico from Escambia County east and south to Hernando County, Lafayette and Gilchrist Counties, and Marion County adjacent to the Withlacoochee River; (b) the Upper St. Johns River Region, consisting of Putnam County from Palatka south; Volusia, Flagler, and Marion Counties adjacent to the St. Johns River or its tributaries; and Lake and Seminole Counties; (c) the Atlantic Region, consisting of counties along the Atlantic coast from Nassau County south to Miami-Dade County; the portion of Monroe County adjacent to the Florida Bay and the Florida Keys; Okeechobee County; and counties along the lower portion of the St. Johns River north of Palatka, which includes Putnam, St. Johns, Clay and Duval Counties; and (d) the Southwest Region, consisting of the counties along the Gulf of Mexico from Pasco County south to Whitewater Bay in Monroe County and DeSoto, Glades, and Hendry Counties.

Despite considerable effort in the early 1980s, scientists have been unable to develop a useful means of estimating or monitoring trends in the size of the

overall manatee population in the southeastern United States (O'Shea 1988, O'Shea *et al.* 1992, Lefebvre *et al.* 1995). Even though many manatees aggregate at warm-water refuges in winter and most if not all such refuges are known, direct counting methods (*i.e.*, by aerial and ground surveys) have been unable to account for uncertainty in the number of animals that may be away from these refuges at any given time, the number of animals which are not seen because of turbid water, and other factors. The use of mark-resighting techniques to estimate manatee population size based on known animals in the manatee photo-identification database also has been impractical, as the proportion of unmarked manatees cannot be estimated.

The only data on population size have been uncalibrated indices based on maximum counts of animals at winter refuges made within one or two days of each other. Based on such information in the late 1980s, the total number of manatees throughout Florida was known to be at least 1,200 animals (Service 2001). Because aerial and ground counts at winter refuges are highly variable depending on the weather, water clarity, manatee behavior, and other factors (Packard *et al.* 1985, Lefebvre *et al.* 1995), interpretation of analyses for short-term trends is difficult (Packard and Mulholland 1983, Garrott *et al.* 1994). Strip-transect aerial surveys are used routinely to estimate dugong (*Dugong dugon*) population size and trends (Service 2001); however, they are difficult to adapt to manatees because of the species' much more linear (*i.e.*, coastal and riverine) distribution. This survey method was tested in the Banana River, Brevard County, and recommended for use in that area to monitor manatee population trends (Miller *et al.* 1998). This approach may also have utility in the Ten Thousand Islands-Everglades area, where manatee population size and distribution is poorly understood.

Beginning in 1991, the former Florida Department of Natural Resources initiated a statewide aerial survey program to count manatees in potential winter habitat during periods of severe cold weather (Ackerman 1995). These surveys are much more comprehensive than those used to estimate a minimum population during the 1980s. The highest two-day minimum count of manatees from these winter synoptic aerial surveys and ground counts is 3,276 manatees in January 2001; the highest count on the east coast of Florida is 1,756 and the highest on the

west coast is 1,520, both in 2001. However, the manatee counts of March 2002, when weather conditions were less favorable, resulted in a total count of 1,796. The Florida Fish and Wildlife Conservation Commission (FWCC) stated in their March 6, 2002, press release that the "low count merely reflects the poor visibility during the count, not a dramatic change in the manatee population." Due to the nearly ideal conditions for the 2001 synoptic survey, the results of that survey are considered the best available estimate of the current minimum population size (*i.e.*, 3,276).

It remains unknown what proportions of the total manatee population were counted in these surveys. No statewide surveys were done during the winters of 1992–93 or 1993–94 because of the lack of strong mid-winter cold fronts. These uncorrected counts do not provide a basis for assessing population trends. However, trend analyses of temperature-adjusted aerial survey counts show promise for providing insight to general patterns of population growth in some regions (Garrott *et al.* 1994, 1995; Craig *et al.* 1997; Eberhardt *et al.* 1999).

It has been possible to monitor the number of manatees using the Blue Spring (Volusia County) and Crystal River (Citrus County) warm-water refuges. At Blue Spring, with its unique combination of clear water and a confined spring area, it has been possible to count the number of resident animals by identifying individual manatees from scar patterns. The data indicate that this group of animals has increased steadily since the early 1970s when it was first studied. During the 1970s the number of manatees using the spring increased from 11 to 25 (Bengtson 1981). In the mid-1980s about 50 manatees used the spring (Service 2001), and by the winter of 1999–2000, the number had increased to 147 (Hartley 2001).

On the northwest coast of Florida, the clear, shallow waters of Kings Bay (Citrus County) have made it possible to monitor the number of manatees using the warm-water refuge in Kings Bay at the head of the Crystal River. Large aggregations of manatees apparently did not exist there until recent times (Service 2001). The first careful counts were made in the late 1960s. Since then manatee numbers have increased significantly. In 1967 to 1968, Hartman (1979) counted 38 animals in Kings Bay. By 1981 to 1982, the maximum winter count had increased to 114 manatees (Powell and Rathbun 1984), and in December 1997, the maximum count was 284 (Buckingham *et al.* 1999). Both births and immigration of animals from

other areas have contributed to the increases in manatee numbers at Crystal River and Blue Spring. Three manatee sanctuaries (areas in which waterborne activities are restricted) in Kings Bay were established in 1980; an additional three were added in 1994, and a seventh in 1998. The increases in counts at Blue Spring and Crystal River are accompanied by estimates of adult survival and population growth that are higher than those determined for the Atlantic coast (Eberhardt and O'Shea 1995, Langtimm *et al.* 1998, Eberhardt *et al.* 1999).

While aircraft synoptic surveys provide a "best estimate" of the minimum manatee population size, there are no estimates or confidence intervals for the size of the Florida manatee population that have been derived by reliable, statistically based, population-estimation techniques. A *census* is a complete count of individuals within a specified area and time period. A *survey*, in contrast, is an incomplete count. With the exception of a few places where manatees may aggregate in clear, shallow water, not all manatees can be seen from aircraft because of water turbidity, depth, surface conditions, variable times spent submerged, and other considerations. Thus, results obtained during typical manatee synoptic surveys yield unadjusted partial counts. While these results are of value in providing information on where manatees occur, likely relative abundance in various areas, and seasonal shifts in manatee abundance, they do not provide good population estimates, nor can they reliably measure trends in the manatee population. Consequently, the Florida Manatee Recovery Plan (Third Version) concludes that "Despite considerable effort in the early 1980s, scientists have been unable to develop a useful means of estimating or monitoring trends in size of the overall manatee populations in the southeastern United States" (Service 2001).

Population models employ mathematical relationships based on survival and reproduction rates to estimate population growth and trends in growth. A deterministic model (a model in which there are no random events) using classical mathematical approaches and various computational procedures with data on reproduction and survival of living, identifiable manatees suggests a maximum population growth rate of about 7 percent per year, excluding emigration or immigration (Eberhardt and O'Shea 1995). This maximum was based on studies conducted between the late 1970s and early 1990s in the well

protected winter aggregation area at Crystal River and did not require estimates of population size. The analysis showed that the chief factor affecting the potential for population growth is survival of adults.

Estimated adult survival in the Atlantic Region (a larger region with less protection) has suggested a slower rate or no population growth over a similar period. This modeling shows the value of using survival and reproduction data obtained from photo-identification studies of living manatees to compute population growth rates with confidence intervals, providing information which can be used to infer long-term trends in the absence of reliable population size estimates. However, collection of similar data has been initiated only recently for other areas of Florida (notably from Tampa Bay to the Caloosahatchee River beginning in the mid-1990s), and none is available over much of the remaining areas used by manatees in southwestern Florida.

A population viability analysis (PVA) (a model in which random events, such as red tide and extremely cold winters, are incorporated) was carried out for manatees based on age-specific mortality rates estimated from the age distribution of manatees found dead throughout Florida from 1979 through 1992 (Marmontel *et al.* 1997). This method of estimating survival relies on certain assumptions that were not fully testable; yet, results again point out the importance of adult survival to population persistence.

Given population sizes that may reflect current abundance, the PVA showed that if adult mortality as estimated for the study period were reduced by a modest amount (for example, from 11 percent down to 9 percent), the Florida manatee population would likely remain viable for many years. However, the PVA also showed that slight increases in adult mortality would result in extinction of manatees over the long term.

The above review demonstrates that the basis for statewide population size "estimates" of any kind is scientifically weak for estimating population trends in manatees. The weight of scientific evidence suggests that the potential for population increases over the last 2 decades is strong for two protected aggregation areas. New population analyses, based on more recent (since 1992) information, are not yet available in the peer-reviewed literature. These analyses will be fundamental to management decisions that are more relevant to the contemporary situation.

In 2001, the Manatee Population Status Working Group (MPSWG) provided a statement summarizing what they believed to be the status of the Florida manatee at that time (Wildlife Trust 2001). The MPSWG stated that for the Northwest and Upper St. Johns River regions, available evidence indicated that there had been a steady increase in animals over the last 25 years. Such growth was consistent with the conditions of these regions—low numbers of human-related deaths, high estimates of adult survival, and good habitat. The statement was less optimistic for the Atlantic Region due to an adult survival rate that was lower than the rate necessary to sustain population growth. The MPSWG believed that this region had likely been growing slowly in the 1980s but may then have leveled off or even possibly declined. They considered the status of the Atlantic Region to be “too close to call.” Such finding was consistent with high levels of human-related and, in some years, cold-related deaths in this region. Regarding the Southwest Region, the MPSWG acknowledged that further data collection and analysis would be necessary to provide an assessment of the manatee’s status in this region. Preliminary estimates of adult survival available to the MPSWG at that time indicated that the Southwest Region was similar to the Atlantic Region and “substantially lower than [the adult survival estimates] for the Northwest and Upper St. Johns Regions.” The Southwest Region was cited as having had high levels of watercraft-related deaths and injuries and natural mortality events (*i.e.*, red tide and severe cold).

Recent information suggests that the overall manatee population has grown since the species was listed in 1967 (50 CFR 17.11). Based on data provided at the April 2002 Manatee Population Ecology and Management Workshop, we believe that the Northwest and Upper St. Johns River regions are doing well and are approaching demographic benchmarks (also referred to as population benchmarks) established in the Florida Manatee Recovery Plan for reclassification to threatened. We also believe that the Atlantic Region is close to meeting the downlisting benchmark for adult survival, at a minimum, and is close to meeting or exceeding other demographic criteria. We are less optimistic, however, regarding the Southwest Region. Although data are still insufficient or lacking to compare the Southwest Region’s status to the downlisting/delisting criteria, preliminary data for adult survival

indicate that this Region is below the benchmarks established in the recovery plan.

Although we are optimistic about the potential for recovery in three out of the four regions, it is important to clarify that in order to downlist or delist the manatee pursuant to the ESA, all four regions must simultaneously meet the appropriate criteria as described in the Florida Manatee Recovery Plan (Service 2001). Additionally, either action would be based on a status assessment for the species throughout its range (United States and Caribbean) that will consider the factors, as described in section 4(a)(1) of the ESA, that determine whether any species is categorized as endangered or threatened.

In order for us to determine that an endangered species has recovered to a point that it warrants removal from the List of Endangered and Threatened Wildlife and Plants, the species must have improved in status to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the ESA. That is, threats to the species must be reduced or eliminated such that the species no longer fits the definitions of threatened or endangered. While suggestions of increasing population size are very encouraging, there has been no confirmation that significant threats to the species, including human-related mortality, injury, and harassment, and habitat alteration, have been reduced or eliminated to the extent that the Florida manatee may be reclassified from endangered to threatened status. Pursuant to our mission, we continue to assess this information with the goal of meeting our manatee recovery objectives.

Threats to the Species

Human activities, and particularly waterborne activities, are resulting in the take of manatees. Take, as defined by the ESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct. Harm means an act which kills or injures wildlife (50 CFR 17.3). Such an act may include significant habitat modification or degradation that kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass includes intentional or negligent acts or omissions that create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include, but are not limited to, breeding, feeding, or sheltering (50 CFR 17.3).

The MMPA sets a general moratorium, with certain exceptions, on the take and importation of marine mammals and marine mammal products [section 101(a)] and makes it unlawful for any person to take, possess, transport, purchase, sell, export, or offer to purchase, sell, or export, any marine mammal or marine mammal product unless authorized. Take, as defined by section 3(13) of the MMPA means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal. Harassment is defined under the MMPA as any act of pursuit, torment, or annoyance which—(i) has the potential to injure a marine mammal or marine mammal stock in the wild; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

Human use of the waters of the southeastern United States has increased dramatically as a function of residential growth and increased visitation. This phenomenon is particularly evident in the State of Florida. The human population of Florida has grown by 124 percent since 1970, from 6.8 million to 15.2 million residents (U.S. Census Bureau), and is expected to exceed 18 million by 2010, and 20 million by the year 2020. According to a report by the Florida Office of Economic and Demographic Research (2000), it is expected that, by the year 2010, 13.7 million people will reside in the 35 coastal counties of Florida. In a parallel fashion to residential growth, visitation to Florida has increased dramatically. It is expected that Florida will have 83 million visitors annually by the year 2020, up from 48.7 million visitors in 1998. In concert with this increase of human population growth and visitation is the increase in the number of watercraft that travel Florida waterways. In 2001, 943,611 vessels were registered in the State of Florida (FWCC 2002). This represents an increase of 42 percent since 1993. The Florida Department of Community Affairs estimates that, in addition to boats belonging to Florida residents, between 300,000 and 400,000 boats registered in other States use Florida waters each year.

Increases in the human population and the concomitant increase in human activities in manatee habitat compound the effect of such activities on manatees. Human activities in manatee habitat include direct and indirect effects. Direct impacts include injuries and deaths from watercraft collisions, deaths

from water control structure operations, lethal and sublethal entanglements with commercial and recreational fishing gear, and alterations of behavior due to harassment. Indirect effects include habitat alteration and destruction, and include such activities as the creation of artificial warm water refuges, decreases in the quantity and quality of warm water in natural spring areas, changes in water quality in various parts of the State, the introduction of marine debris, and other, more general disturbances.

Manatee mortality has continued to climb steadily. Average annual total mortality in the 1990s (227.9) was nearly twice that of the 1980s (118.2). In 2001, a total of 336 manatee deaths were documented. Total deaths over the past 5 years are about two and a half times greater than they were in the first half of the 1980s. Although a large part of this increase may be due to an increase in manatee abundance, rapid growth in human activities and development may also be significant factors. Over the past 5 years, human-related manatee mortality has accounted for 33 percent of all manatee deaths, with watercraft-related deaths accounting for nearly 27 percent. These rates are about 5 to 6 percent higher than the early 1980s, when about 28 percent of all deaths were human-related and 21 percent were due to watercraft (Marine Mammal Commission Annual Report to Congress 2002).

The continuing increase in the number of recovered dead manatees throughout Florida has been interpreted as evidence of increasing mortality rates (Ackerman *et al.* 1995). Between 1976 and 1999, the number of carcasses collected in Florida increased at a rate of 5.8 percent per year, and deaths caused by watercraft strikes increased by 7.2 percent per year (Service 2002). Because the manatee has a low reproductive rate, a decrease in adult survivorship due to watercraft collisions could contribute to a long-term population decline (O'Shea *et al.* 1985). It is believed that a 1 percent change in adult survival likely results in a corresponding change in the rate of population growth or decline (Marmontel *et al.* 1997).

Collisions with watercraft are the largest source of human-related manatee deaths. Data collected during manatee carcass salvage operations in Florida indicate that a total of 1,050 manatees (from a total carcass count of 4,240) are confirmed victims of collisions with watercraft (1978 to 2001). This number may underestimate the actual number of watercraft-related mortalities since many of the mortalities listed as "undetermined causes" show evidence

of collisions with vessels. Collisions with watercraft comprise approximately 25 percent of all manatee mortalities since 1978. Approximately 75 percent of all watercraft-related manatee mortality has taken place in 11 Florida counties (Brevard, Lee, Collier, Duval, Volusia, Broward, Palm Beach, Charlotte, Hillsborough, Citrus, and Sarasota) (Florida Marine Research Institute Manatee Mortality Database 2002). The last 5 years have been record years for the number of watercraft-related mortalities (Marine Mammal Commission Annual Report to Congress 2002).

The second largest cause of human-related manatee mortality is entrapment in water control structures and navigation locks (Florida Marine Research Institute Manatee Mortality Database 2002). Manatees may be crushed in gates and locks or may be trapped in openings where flows prevent them from surfacing to breathe. Locks and gates were responsible for 159 manatee deaths between 1978 and 2001, or approximately 4 percent. While there are no well-defined patterns characterizing these mortalities, it is believed that periods of low rainfall increase the likelihood of manatees being killed in these structures. These periods require more frequent, large-scale movements of water, which require more frequent gate openings and closings in areas that attract manatees searching for fresh water. We have been working, through an interagency task force, with various Federal and State agencies to retrofit these structures with reversing mechanisms that prevent manatee crushings.

Manatees are also affected by other human-related activities. Impacts resulting from these activities include death caused by entrapment in pipes and culverts; entanglement in ropes, lines, and nets; ingestion of fishing gear or debris; vandalism; and poaching. These activities have accounted for 115 manatee deaths since 1978, an average of more than 4 deaths per year. As with watercraft-related mortalities, these deaths also appear to be increasing, with 40 of these deaths occurring between 1997 and 2001. This is an average of 8 deaths per year over the last 5 years attributable to this cause.

Activities affecting manatees at warm water sites include boat operations, recreational fishing, directed interactions between humans and manatees (including pursuit by swimmers and boats), and other disturbances. Specifically, boats operating within manatee aggregations, anglers casting fishing lines into aggregations, boaters and/or swimmers

pursuing manatees, and other disruptions cause animals to disperse and become displaced from warm water refuges. Displaced animals may be exposed to cold water temperatures below known physiological thresholds. Exposure to cold may cause hypothermia or cold stress, conditions known to kill manatees (Worthy 1999). In addition, prolonged, nonlethal exposure to cold may affect calving success and fecundity (Rommel 2002).

Tyson (1998) documented boating and fishing activity in warm water discharges. Observations included anglers maneuvering boats within manatee aggregations, boat operators looking for and petting manatees, boaters attempting to swim with manatees, anglers wading and casting into manatee aggregations, manatees being hooked and maneuvered while entangled, a manatee struck with an anchor, manatees being provided with water, etc. These activities resulted in the displacement of animals, manatees hooked or entangled in fishing line, possible boat strikes, and other adverse interactions. Swimmer interactions were further documented by Wooding (1997) at Three Sisters Springs, Citrus County, Florida. Some manatees left the, then unprotected, spring area when boats with swimmers approached at the start of the day. Other manatees left when the first swimmers entered the water. Those that remained either ignored swimmers or turned away and swam out of reach; a small number sought out physical contact with swimmers. Gorzelany observed manatees being "crowded out" (displaced) by large numbers of swimmers searching out encounters with wintering manatees (Mote Marine Laboratory, pers. comm. 2001).

Anglers have been observed casting into manatee aggregations at warm water sites, hooking and entangling manatees (Tyson 1998). Discarded fishing line, at times caught on water bottoms, plants, and structures, is also known to entangle manatees and is occasionally ingested by manatees. Entangled monofilament fishing line may cut into the manatees' skin; manatees are frequently scarred by these cuts and flippers are occasionally amputated through the cutting effect of the line (USFWS unpublished data). There are records of manatees having died from entanglements due to infection and septicemia associated with these injuries. Manatees ingesting fishing line and hooks are known to die from intestinal obstructions, tears in the gut, and other complications (Florida Marine Research Institute Manatee Mortality Database 2002).

In 2001, fifteen manatees were rescued from fishing gear, including seven from monofilament line. The number of such incidents has been increasing over time; in the early phases of our manatee rescue, rehabilitation, and release program, no more than one or two incidents were documented per year. Recent annual totals have ranged between ten and fifteen reported incidents. Since 1973, a total of 124 gear-associated manatees have been rescued, including 50 from monofilament entanglement and ingestion (Service, unpubl. data). In addition to these rescues, at least 14 deaths have been attributed to monofilament fishing line and others are suspected (Florida Marine Research Institute Manatee Mortality Database 2002).

Boats operating within and adjacent to warm water aggregations of manatees pose a particularly serious threat to wintering manatees, since manatees are often killed or injured as a result of collisions with watercraft. The likelihood of adverse manatee encounters with watercraft increases in the vicinity of and within unprotected wintering sites because of the greater concentration of manatees and manatee activity in these areas. In 2001, at least 25 percent (82 of 325) of known manatee deaths were caused by watercraft, as was discussed above. This was the second highest year on record (out of more than 27 years of monitoring) for total number of watercraft-related manatee deaths. Nonlethal injuries are also documented by researchers who monitor the accumulation of scars from boat strikes on individual manatees on an annual basis. As documented in the U.S. Geological Survey's (USGS) database, most animals that are known to have been struck are struck multiple times. Such nonlethal injuries may reduce calf production and survival in wounded females (O'Shea *et al.* 2002).

The FWCC's manatee carcass salvage program has documented the presence of watercraft-killed manatees within the vicinity of warm water discharges. While the presence of a carcass does not necessarily indicate that a collision occurred at that site, there are a few cases where collisions have been documented at warm water sites. In one instance, a tug/barge maneuvering within the approach to a warm-water aggregation site ran over a manatee, crushing and killing the animal between the hull and the water bottom (Florida Marine Research Institute Manatee Mortality Database 2002). In Lee County, two manatees using a secondary warm-water site located at the foot of a

navigation lock were struck and killed by watercraft operating nearby (Florida Marine Research Institute Manatee Mortality Database 2002). Researchers monitoring winter manatee aggregations have noted the frequent and regular occurrence of nonlethal, fresh cuts on animals using these sites, particularly at the outset of the winter season (Hartley, Florida Division of Parks and Recreation, pers. comm. 2001; Curtin, USGS Contractor, pers. comm. 2001).

Manatee Protection Areas

To minimize disturbance to wintering manatees at both industrial and natural warm water sites during this critical time of year, we and the State of Florida have implemented a series of Federal sanctuaries and State protection areas at and near these sites. To date, the majority of known warm water sites used by manatees in Florida have been protected. Manatee protection areas have also been established at other sites throughout coastal Florida where conflicts between boats and manatees have been well documented and where manatees are known to frequently occur. We are providing additional protection or enhancing existing protection areas by establishing additional manatee sanctuaries and/or manatee refuges at thirteen locations in Florida.

Federal authority to establish protection areas for the Florida manatee is provided by the ESA and the MMPA, and is codified in 50 CFR, part 17, subpart J. We have discretion, by regulation, to establish manatee protection areas whenever there is substantial evidence showing such establishment is necessary to prevent the taking of one or more manatees. In accordance with 50 CFR 17.106, areas may be established on an emergency basis when such takings are imminent.

We may establish two types of manatee protection areas—manatee refuges and manatee sanctuaries. A manatee refuge, as defined in 50 CFR 17.102, is an area in which we have determined that certain waterborne activities would result in the taking of one or more manatees, or that certain waterborne activities must be restricted to prevent the taking of one or more manatees, including but not limited to, a taking by harassment. A manatee sanctuary is an area in which we have determined that any waterborne activity would result in the taking of one or more manatees, including but not limited to, a taking by harassment. A waterborne activity is defined as including, but not limited to, swimming, diving (including skin and scuba diving), snorkeling, water skiing,

surfing, fishing, the use of water vehicles, and dredge and fill activities.

Synopsis of Manatee Lawsuit Settlement

In *Save the Manatee Club, et al. v. Ballard, et al.*, Civil No. 00-00076 EGS (D.D.C.), several organizations and individuals filed suit against the Fish and Wildlife Service and the U.S. Army Corps of Engineers (Corps) alleging violations of the ESA, MMPA, National Environmental Policy Act (NEPA), and the Administrative Procedure Act. Four groups representing development and boating interests intervened. Following extensive negotiations, a Settlement Agreement was approved by the court on January 5, 2001. Under the terms of the settlement, we agreed to the following:

- Submit a proposed rule for new refuges and sanctuaries to the **Federal Register** by April 2, 2001, and submit a final rule by September 28, 2001. Subsequent to the Federal settlement, the FWCC also voted to settle *Save the Manatee v. Egbert*, Case No. 90-00-400CIV17-WS (N.D.Fla) (the State case). That settlement, which was entered by the court on November 7, 2001, calls for very similar protective measures in many of the locations included in our proposed rule. As a result of these simultaneous processes, the parties in the Federal lawsuit agreed to extend the April 2 deadline in an attempt to negotiate a means to avoid duplication of effort and better serve the public. Subsequent negotiations resulted in additional extensions, which resulted in the proposed rule being submitted to the **Federal Register** on August 3, 2001. We also agreed to evaluate the propriety of invocation of our emergency sanctuary/refuge designation authority. We published an advance notice of proposed rulemaking in the **Federal Register** on September 1, 2000, and held a series of six public workshops in December 2000. We received 1,752 comments in response to the advance notice, and 396 people attended the public workshops. The proposed rule was published in the **Federal Register** on August 10, 2001 (66 FR 42318). A 60-day comment period followed this publication. In addition, we held four public hearings in September 2001, to provide the public an opportunity to comment. We held these hearings in Crystal River, Clearwater, Venice, and Melbourne, Florida. As a result of both the public hearings and written submissions, we received approximately 3,500 comments. These comments are summarized and responded to in the "Summary of Comments and Recommendations" section of this rule.

On January 7, 2002, we published a final rule designating two sites in Brevard County, the Barge Canal and Sykes Creek, as Federal manatee refuges (67 FR 680).

- Revise the Manatee Recovery Plan. We were required, by December 1, 2000, to make a draft revised Recovery Plan available for public review and comment, and to circulate our final revised Recovery Plan for signature no later than February 28, 2001. We published a draft revised Recovery Plan on November 30, 2000, and received over 500 comments. The Plaintiffs and Interveners agreed to new dates for development of a second draft and finalization of the Recovery Plan. As a result of the comments, we made substantial revisions to the Recovery Plan and subsequently issued a second draft for public review and comment on July 10, 2001. The Recovery Plan was finalized on October 30, 2001.

- Pursue a rulemaking proceeding to adopt incidental take regulations under the MMPA. By March 6, 2001, we were required to submit to the **Federal Register** an advance notice of proposed rulemaking; invite by letter the Corps and other entities that conduct activities which may influence factors relating to effects of watercraft on manatees to participate in the MMPA rulemaking process; and promptly provide copies of the **Federal Register** notice and invitation letters to the Plaintiffs and Interveners. The advance notice was published in the **Federal Register** on March 12, 2001, and copies of the advance notice and invitation letters were mailed to the Plaintiffs and Interveners on March 6, 2001. We will determine if any anticipated take by entities participating in the rulemaking process meets the requirements set forth in section 101(a)(5) of the MMPA, 16 U.S.C. 1371(a)(5). The process should result in—(1) If the requirements set forth in section 101(a)(5) of the MMPA are deemed satisfied, a proposed and final MMPA incidental take regulation; (2) preparation of appropriate NEPA documentation which will identify and assess the direct, indirect, and cumulative effects of the overall MMPA regulation (either an Environmental Assessment or an Environmental Impact Statement (EIS)); (3) detailed assessments of agency programs, including cumulative effects on manatees and their habitat, for any activities covered under the regulation; and (4) consultation pursuant to section 7 of the ESA. We have determined that we will prepare an EIS in association with this action. Draft and final products are due on November 5, 2002, and May 5, 2003, respectively. If the

requirements of the MMPA cannot be met, we must notify the Plaintiffs and Interveners as soon as practicable, and publish a negative finding in the **Federal Register** with the basis for denying the request. We must publish our negative finding by May 5, 2003. We will conduct public hearings on proposed rules as appropriate.

- By March 6, 2001, furnish Plaintiffs and Interveners with a letter describing how we will spend increased enforcement resources in FY 2001. This letter was sent on March 6, 2001.

- Revise, and make available for public review, our “interim guidance” for addressing potential manatee impacts associated with development and permitting of new watercraft access facilities. We were required to submit this document by March 6, 2001. The revised document appeared in the **Federal Register** on March 14, 2001 (66 FR 14924–32). We agreed to provide at least thirty (30) days of public comment and actually provided sixty (60) days comment on the revised draft guidance. The final decision on the guidance was released to the public on August 13, 2001, and published in the **Federal Register** on August 21, 2001 (66 FR 43885).

- Provide written progress reports on the status of tasks agreed upon in the Settlement Agreement every 6 months. The first report was provided to the parties on July 5, 2001 and subsequent reports have been provided accordingly.

- Provide copies of concurrence and non-concurrence letters to Plaintiffs and Interveners. Whenever we send a letter to the Corps in response to the Corps’ determination that a project “may affect” the manatee or “may affect but is not likely to adversely affect” the manatee, we are required to concurrently make a copy of the correspondence available to the Plaintiffs and Interveners. This obligation may be satisfied by establishing a web-based system or by transmitting a copy of the letter by U.S. mail or electronically. Until such time as we establish a web-based system, we will forward copies by U.S. mail. These letters have been provided accordingly.

- Provide copies of Biological Opinions (BO). Whenever we issue a final BO regarding the effect of a particular project on manatees or manatee critical habitat, we are required to concurrently make a copy of that opinion available to the Plaintiffs and Interveners. This obligation may be satisfied by establishing a web-based system or by transmitting a copy of the opinion by U.S. mail or electronically. Until such time as we establish a web-based system, we will forward copies by

U.S. mail. These biological opinions have been provided accordingly.

- On July 9, 2002, the United States District Court for the District of Columbia ruled that the Federal Government violated the Settlement Agreement by failing to designate a sufficient number of refuges and sanctuaries throughout peninsular Florida. The Court ruled that we must complete the rulemaking with respect to the 16 proposed areas contained in the August 10, 2001, proposal. On July 31, 2002, the Court subsequently determined that this must be completed by November 1, 2002. The Court also determined that the sites in this final rule, in conjunction with the two sites established previously, “would satisfy the general distribution requirement” of the Settlement Agreement. On September 20, 2002, we published an emergency rule designating seven sites as manatee refuges and sanctuaries on Florida’s west coast for a period of 120 days (67 FR 59408).

Coordination With State Actions

An extensive network of manatee speed zones and sanctuaries has been established throughout peninsular Florida by Federal, State, and local governments. This existing structure works toward our goal of providing adequate protected areas throughout peninsular Florida to satisfy the biological requirements of the species. The purpose of our recent evaluation was to identify gaps in the existing network and to establish appropriate measures for filling those gaps. We have focused the current action on those sites in which we have determined that Federal action can effectively address the needs in the particular area.

We recognize that the existing system of speed zones and sanctuaries has been established primarily by State and local governments. We also recognize the important role of our State and local partners, and we continue to support and encourage State and local measures to improve manatee protection.

The sites contained in this rule were selected based on the criteria described below (see “Site Selection Process and Criteria” section), prior to the disclosure of terms of the proposed settlement in the State case, *Save the Manatee v. Egbert*, Case No. 90-00-400CIV17-WS (N.D.Fla.), entered on November 7, 2001. That settlement contains a list of sites that the FWCC has and will be evaluating for potential State designation of speed zones and sanctuaries. There is considerable overlap in terms of sites identified in that settlement and the sites discussed in our proposed rule. The fact that the

State's list of sites is more expansive than the list in our rule does not indicate a determination on our part that sites on the State's list, and not considered by us, do not warrant protection, but is rather a reflection of our focusing on sites for which we believe we can provide the most effective protection for manatees, given our staffing and funding limitations.

We have been coordinating closely with the FWCC, since the terms of their proposed settlement were disclosed, to determine which sites are most appropriate for State designation and which are better suited for Federal designation. At the time our proposed rule was prepared, final agreement had not been reached on the terms of the proposed State settlement. Pursuant to the terms of our previously described Settlement Agreement, we were required to submit our proposed rule to the **Federal Register** by April 2, 2001, which was prior to the time in which the FWCC made a final decision regarding sites they intend to evaluate. The deadline was extended on several occasions by agreement of the parties in an attempt to negotiate a means to avoid duplication of effort and better serve the public. However, eventually, we were required to proceed with publication in advance of finalization of the State's settlement agreement. Therefore, there are overlaps between our rule and State actions.

We strongly believe that the State should have leadership in establishing additional manatee protection areas. The State has taken a leading role in this initiative. Pursuant to a meeting of the Florida Fish and Wildlife Conservation Commissioners on September 12, 2002, the State established a manatee protection area at Blue Waters and described other sites to be designated as protection areas. Local governments have also enacted protective measures at some of these sites. We, however, must also meet our settlement obligations. In the future, if the State or counties implement measures at these sites that, in our view, provide comparable protection for manatees, we will consider withdrawing or modifying established designations through the rulemaking process. In addition to acknowledging State and county roles in this process and our legal obligations, we recognize the importance of their actions and the role that they play in manatee recovery. These actions are a priority for us and we will continue to promote these and other actions to fulfill our recovery responsibilities. In furtherance of this, we are publishing a **Federal Register** notice seeking public input on additional manatee protection

measures. The public's input will be used to help determine the extent of additional protections necessary for manatee recovery.

Site Selection Process and Criteria

In preparation for making a decision on sites to propose as manatee protection areas, we met with representatives from local, State, and Federal agencies and organizations involved in manatee research, management, and law enforcement. These meetings helped us to develop a list of sites throughout Florida and southeast Georgia that manatee experts believed should be considered for possible designation as manatee protection areas.

We published an advance notice of proposed rulemaking in the **Federal Register** on September 1, 2000 (65 FR 53222). The purpose of the advance notice was to inform the public that we were initiating the process of investigating areas for possible designation as manatee protection areas and to solicit initial public input. We received 1,752 responses to the advance notice. Of these, 1,737 supported our efforts to establish additional manatee protection areas, and 13 opposed them. The remaining two comments did not state a specific opinion.

We also conducted six public workshops throughout peninsular Florida to present the list of potential sites and to solicit public input. A total of 396 people attended the workshops, and 166 provided either oral or written comments. Of these, 79 were general in nature, either supporting our efforts to establish additional manatee protection areas (40) or opposing them (39); 28 participants specifically opposed and 8 specifically supported the areas. An additional 36 comments were not specific to the topic or discussed other items. Fifteen commenters provided specific information or comments, including recommendations to increase enforcement, increase education, use new technology including satellite tracking of manatees, and other rule-related topics.

We selected sites for inclusion in this rule from the list of sites developed through the preliminary meetings and the information gathered at the public workshops and in response to the advance notice. We based site selection on four factors—(1) Evidence that the site is used by manatees; (2) historic evidence of take (harm or harassment) of manatees at the site or similar sites due to waterborne activities; (3) the potential for additional take based on manatee and human use of the site; and (4) a determination that we could implement

effective measures at the site to address the identified problem.

In documenting manatee use and historic manatee harm and harassment, we relied on the best available information, including aerial survey and mortality data and additional information from the Florida Marine Research Institute and the USGS Sirenia Project. These data were supplemented with information from manatee experts, the public, and our best professional judgment. In determining the potential effectiveness of our actions, we considered the costs of managing and enforcing manatee protection areas and the benefits (or lack thereof) to manatee conservation. Costs associated with site management include installation and maintenance of appropriate signage, public education, and enforcement. In addition, designation of manatee sanctuaries in the waters bordered by private property entail additional administrative burdens in terms of identifying and providing access to affected residents. Finally, we evaluated the effectiveness of our actions against the likely effectiveness of anticipated similar actions by State and/or local governments. It was our goal to avoid sites that could be most effectively addressed by State or local government, and, where we felt we must act in addition, we have made every effort to make our designations consistent with the existing State or local designations.

Previous Federal Action

On August 10, 2001, we published in the **Federal Register** a proposed rule to establish 16 additional manatee protection areas (66 FR 42318), including the areas designated in this rule. In the proposed rule, we requested all interested parties to submit factual reports or information that might contribute to the development of a final rule. We sent direct notification of the proposal and public hearings to 3,258 institutions and individuals, including Federal and State agencies, county governments, scientific organizations, and interested parties. We published legal notices announcing the proposal, inviting public comment, and announcing the schedule for public hearings, on August 30, 2001, in the *Fort Myers News-Press*, *Citrus County Chronicle*, *Daytona Beach News-Journal*, and *Naples Daily News*, on August 31, 2001, in the *St. Petersburg Times*, *Miami Herald*, *Orlando Sentinel*, *Charlotte Sun-Herald*, and *Tallahassee Democrat*, and on September 4, 2001, in *Florida Today*. The comment period closed on October 9, 2001. We held the public hearings at the Plantation Inn and Conference Center in Crystal River,

Florida, on September 10, 2001; Harborview Convention Center in Clearwater, Florida, on September 11, 2001; Holiday Inn in Venice, Florida, on September 12, 2001; and the Radisson Hotel & Conference Center in Melbourne, Florida, on September 13, 2001. Approximately 315 people were in attendance at the public hearings. We received oral comments from 121 of these individuals.

During the comment period, we received approximately 3,500 written and oral comments concerning the proposal. Most expressed opposition to, or concern about, the proposed designation; however, a number of individuals supported the proposed action. Opposition to the proposed designation primarily centered on concerns regarding potential economic effects and inconvenience to boaters resulting from the action, and the adequacy of current State conservation actions to protect the manatee. We received comments from the State of Florida. The remaining comments were from individuals or representatives of organizations or groups. The State supported the proposed action. On January 7, 2002, we published a final rule that established two of the 16 proposed areas as manatee protection areas located within the water bodies commonly known as the Barge Canal and Sykes Creek, in Brevard County (67 FR 680). On September 20, 2002, we published an emergency rule designating four of the remaining areas proposed in August, 2001, as manatee sanctuaries and three as manatee refuges in Citrus, Pinellas, and Hillsborough Counties for a period of 120 days (67 FR 59408).

The September 20, 2002, emergency rule stated that the emergency rule would remain in effect through January 20, 2003. However, this final rule replaces the emergency rule. Therefore, the manatee protection areas set forth in the September 20, 2002, rule are no longer in effect. From the emergency rule to this final rule, we have implemented changes, both in the sizes of many of the protection areas and in the timeframes for restrictions. Details of these changes are described later in this document in a section called "Summary of Changes From the Proposed Rule."

Effective Date

We are making this rule effective upon publication. In accordance with the Administrative Procedure Act, we find good cause as required by 5 U.S.C. 553(d)(3) to make this rule effective immediately upon publication in the **Federal Register**. As discussed in

"Areas Designated as Manatee Sanctuaries and Refuges," we need to establish the manatee protection areas in and adjacent to the warm water sites prior to the time when manatees will be seeking warmer waters for the winter and need to ensure that manatees will be protected from waterborne activities at non-winter sites. A 30-day delay in making these sites effective would result in further risks of manatee mortality, injury, and harassment during the period of delay. In view of the finding of substantial evidence that taking of manatees at these 13 sites is imminent, we believe good cause exists to make this rule effective upon publication. In a proposed rule of August 10, 2001 (66 FR 42318), we solicited public comment on the 13 manatee protection areas established by this rule as required by 5 U.S.C. 553(c). The 30-day delay would be contrary to the public interest because of the imminent threat to manatees and the need to provide immediate protection.

Definitions

Idle speed means the minimum speed needed to maintain watercraft steerage.

Planing means riding on or near the water's surface as a result of the hydrodynamic forces on a watercraft's hull, sponsons (projections from the side of a ship), foils, or other surfaces. A watercraft is considered on plane when it is being operated at or above the speed necessary to keep the vessel planing.

Slow speed means the speed at which a watercraft proceeds when it is fully off plane and completely settled in the water. Watercraft must not be operated at a speed that creates an excessive wake. Due to the different speeds at which watercraft of different sizes and configurations may travel while in compliance with this definition, no specific speed is assigned to slow speed. A watercraft is *not* proceeding at slow speed if it is: (1) On a plane, (2) in the process of coming up on or coming off of plane, or (3) creating an excessive wake. A watercraft *is* proceeding at slow speed if it is fully off plane and completely settled in the water, not creating an excessive wake.

Slow speed (channel exempt) designates a larger area where slow speed is required, through which a maintained, marked channel is exempt from the slow speed requirement.

Slow speed (channel included) means that the slow-speed designation applies to the entire marked area, including within the designated channel.

Wake means all changes in the vertical height of the water's surface caused by the passage of a watercraft,

including a vessel's bow wave, stern wave, and propeller wash, or a combination of these.

Exceptions

Existing regulations provide regulatory relief for watercraft access to private residences, boat houses, and boat docks located in manatee sanctuaries (50 CFR 17.108). Sanctuaries described in this final rule are located in areas adjoining property owned by public and other private property owners. Public and private property owners will be permitted to access and maintain property within respective manatee sanctuaries. During the restricted period (either seasonal or year-round) watercraft operations (conducted by appropriately identified vessels) will be restricted to idle speed. Maintenance activities necessary for maintaining property and waterways during this period of time are also allowed, subject to any applicable Federal, State, and/or local government permitting requirements. We believe that these exceptions will ensure that this rule has a minor impact on activities conducted by public and private property owners.

Summary of Comments and Recommendations

Written comments and oral statements presented at the public hearings and received during the comment period are addressed in the following summary. Comments of a similar nature or point are grouped into a number of general issues. Comments and our response to each are discussed below.

Comment 1: The FWCC noted our intention to consider withdrawing Federal designations should State or local governments enact comparable protective measures, and recommended that we define the means by which we will determine if actions by State or local governments provide a comparable level of protection.

Response: The 13 manatee refuges and sanctuaries covered in this rulemaking were originally proposed in our August 10, 2001, proposed rule. While these sites are important for manatee conservation and meet the criteria for Federal protection, when we established the Barge Canal and Sykes Creek manatee refuges on January 7, 2002 (67 FR 680), we believed the remaining sites were of lesser urgency. We were also not convinced at the time of final rule publication that these protection measures were necessary for recovery of the species. Therefore, in our January 7, 2002, final rule, we postponed decision-making on these

sites until December 2002 and stated that we would consider withdrawing our proposals should State or local government implement suitable protection.

However, on July 9, 2002, the Court ruled that this approach did not comply with our Settlement Agreement requiring that we designate additional refuges and sanctuaries throughout peninsular Florida within a certain time frame. On July 31, 2002, the Court further ordered us to complete our rulemaking process on these sites by November 1, 2002.

Subsequent to our August 2001 proposal, State and local governments have adopted and, in some cases, implemented manatee protection measures at several of the manatee refuges and sanctuaries established in this rule. In some cases the State or local measures are more restrictive than our original proposals, while in others they are less restrictive. Based upon new information resulting from these activities and comments received, we have made several modifications to our original proposals in order to ensure, when possible, that Federal, State, and local measures are consistent and clear to the public and can be consistently enforced by all entities (see "Summary of Changes from the Proposed Rule" section). We do not believe that any of these changes will result in reduced manatee protection from our original proposal. In cases where we have increased our restrictions beyond those originally proposed, we have concluded that this action will have negligible effects on the regulated public beyond the actions already promulgated by State or local governments.

In the future, we may withdraw or revise our designations if, in our view, State and local government(s) provide a comparable level of protection. Since it is not currently possible to measure the precise level of effectiveness of any particular manatee protection program, we must rely upon the best professional judgment of our biologists to determine whether alternative State or local measures are comparable to ours. We acknowledge that there may be more than one way to provide adequate manatee protection at any given location. In making our determination, we will consider factors such as areal extent of the measures, duration of measures, and types of restrictions (e.g., no entry, motorboat prohibited, idle speed, slow speed, etc.). Our final determination will be based on our judgment of whether a State or local management plan provides comparable protection by reducing or eliminating

take to the same or greater extent as our actions.

Comment 2: The FWCC noted that appropriate posting of designated manatee protection areas is a critical element in the success of manatee protection zones, and recommended that we schedule meetings with the FWCC, Navigation Districts, local governments, and others to develop a clear delineation of responsibilities for posting signs for federally designated areas.

Response: We agree that appropriate signage is critical to the safe and effective implementation of manatee protection areas. We will continue to involve the FWCC, Inland Navigation Districts, local governments, and the U.S. Coast Guard, as appropriate, in the development of sign plans for these Federal manatee protection areas. By coordinating with these agencies, we will minimize any discrepancies and/or disparities between signs, sign placement, and legal authorities. These actions will minimize inconsistencies and confusion amongst the boating public.

Comment 3: The FWCC expressed concern regarding enforcement of the new manatee protection areas and recommended that we clarify that we are responsible for enforcement of these areas. They also expressed concern that establishment of Federal manatee protection areas in and adjacent to State speed zones, which carry different penalties for violation, may generate confusion among the boating public.

Response: Manatee protection areas are only effective to the extent that boaters comply with posted regulations. As such, enforcement is an essential component of our effort to establish additional manatee protection areas. FWCC officers are authorized to enforce Federal manatee protection area regulations, just as our law enforcement officers can and do enforce State manatee protection regulations. We welcome any assistance that the FWCC and other enforcement entities can provide in the enforcement of these manatee protection areas, but we have made a commitment to ensure that adequate enforcement is provided for these areas. The ability to adequately post and enforce designated sites was a factor in our site selection process.

Comment 4: The FWCC noted that we delayed action on 14 sites identified in the proposed rule until December 2002 to give State and local governments the opportunity to enact comparable protective measures. The FWCC stated that they have no plans to consider rules in two of the sites in the proposed rule (Little Sarasota Bay and Shell Island)

and that no final State action would be taken on sites in Tampa Bay by December 2002.

Response: While we had originally delayed action on these sites until December 2002, to give other agencies an opportunity to enact comparable measures, we are promulgating a rule at this time to ensure compliance with the Court's orders of July 9, 2002, and July 31, 2002, and to ensure compliance with the terms of the Settlement Agreement. Included in our rule are measures to protect Little Sarasota Bay and Shell Island and to designate protection at sites in Tampa Bay.

Comment 5: Several commenters recommended establishing manatee protection areas at several sites in addition to, or in lieu of, the 16 sites identified in the proposed rule. Other sites recommended for consideration included—the downtown Jacksonville portion of the St. John's River, Duval County; Goodby's Creek, Duval County; the Tomoka River, Volusia County; the Canaveral sewer outfall, Brevard County; the Indian River southeast of the railroad bridge causeway, Brevard County; the Haulover Canal observation area, Brevard County; the Riviera Beach power plant outfall, Palm Beach County; the Weeki Wachee River, Hernando County; the Little Manatee River, Hillsborough County; the Manatee and Braden Rivers, Manatee County; Charlotte Harbor, Charlotte County; Bokeelia Point, Lee County; San Carlos Bay, Lee County; the Caloosahatchee River, Lee County; Mullock Creek/Ten Mile Canal, Lee County; Estero Bay, Lee County; Everglades National Park, Collier and Monroe Counties; Faka Union Canal/Port of the Islands, Collier County; and Ten Thousand Islands/Chokoloskee Bay, Collier County.

Response: In designating manatee protection areas throughout peninsular Florida, we considered the needs of the species on an ecosystem level in order to address life requirements of the manatee and to progress toward recovery of the species. All of the above-mentioned sites, and many others, were considered at some point in the evaluation process. Some, such as the Weeki Wachee River, Goodby's Creek, and the Canaveral sewer outfall, did not meet our criteria for further consideration because adequate protective measures are currently in place at these sites and the likelihood of future take at these sites is limited, provided the existing regulations are appropriately enforced. Others, such as Caloosahatchee River, Everglades National Park, and Ten Thousand Islands/Chokoloskee Bay, did not meet our criteria for designation at this time

because it is as yet unclear, based on current information, what additional protective measures could be implemented to effectively reduce on-going watercraft-related manatee mortality in these areas. We note that even the commenter who recommended we take immediate action in the Ten Thousand Islands/Chokoloskee Bay area could offer no specific recommendation as to what to do in this area. We agree that the remaining sites mentioned above (the St. John's River in downtown Jacksonville, the Tomoka River, the Haulover Canal observation area, the Indian River southeast of the railroad bridge causeway, the Riviera Beach power plant outfall, the Little Manatee River, the Manatee and Braden Rivers, Charlotte Harbor, Bokeelia Point, Estero Bay, San Carlos Bay, Mullock Creek/Ten Mile Canal, and Faka Union Canal/Port of the Islands) may warrant further consideration, particularly if manatees do not make satisfactory progress toward recovery. However, we do not agree with the commenters that action at any of these sites is any more appropriate and/or feasible than the actions identified in our August 10, 2001, proposed rule.

We are committed to continuing the protection of the manatee through a cooperative effort with our management partners at the Federal, State, and local levels, as well as efforts involving private entities and members of the public. We encourage State and local measures to improve manatee protection. Additionally, we are publishing a **Federal Register** notice seeking public input on additional manatee protection needs. This information will be used to help determine the extent of additional protection needed for recovery.

Comment 6: In recommending action at the sites identified in Comment 5, some commenters noted that several of the sites identified in our proposed rule were under consideration for designation by the FWCC and/or local governments, and questioned our decision to include such sites in our proposed rule, given the likelihood that these sites would be appropriately regulated without Federal designation.

Response: Several of the sites in our proposed rule overlapped with recent State or local actions (see our response to "Comment 1"). We first became aware of this overlap when the Plaintiffs in the State lawsuit made the terms of their draft Settlement Agreement public. Due to our inability to discuss pending legal actions with the FWCC, and our need to meet our settlement obligations, we published the proposed rule. We are publishing this final rule at this time

because these actions will reduce the take of manatees and are necessary to fulfill our settlement obligations.

Comment 7: One commenter noted that the sites identified in our proposed rule differed in some respects from the "areas with inadequate protection" identified in our "Final Interim Strategy on Section 7 Consultations for Watercraft Access Projects That May Indirectly Affect the Florida Manatee" (Final Interim Strategy) (66 FR 14924).

Response: The areas we proposed for designation as Federal manatee protection areas were in some cases different from the waterbodies we identified as "areas with inadequate protection" for the purposes of the Final Interim Strategy.

The standard for manatee protection areas is that such establishment is "necessary to prevent the taking of one or more manatees" (50 CFR Part 17.103). Because "take" is very broadly defined, action of some form could be justified for many coastal waters in the State of Florida. In order to focus our efforts in the current rulemaking, we defined four criteria for selecting sites as follows—(1) Evidence that the site is used by manatees; (2) historic evidence of take (harm or harassment) of manatees at the site or similar sites due to waterborne human activities; (3) the potential for additional take based on manatee and human use of the site; and (4) a determination that we could implement effective measures at the site to address the identified problem. Again, many sites throughout Florida could be argued to satisfy the first three criteria to some extent; however, the vast majority of sites do not satisfy criterion four because of limitations we face because many areas present manatee protection problems due to circumstances that are difficult or impossible to correct within our manatee protection area authority and in terms of personnel and budget.

On the other hand, "areas with inadequate protection" were identified in the context of conducting ESA section 7 consultations regarding U.S. Army Corps of Engineers authorization of boat access facilities. In this context, watercraft-related "take" of manatees is an indirect effect of the authorization of a boat access facility. In order to be considered an "area with inadequate protection" in this context, the existing protection measures on a given waterbody must be such that the likely result of adding additional boat access to the area is a foreseeable increase in watercraft-related take. This could be because current protection measures are either totally lacking or are inadequate in areas with chronic watercraft-related take, because of a lack of adequate law

enforcement, or because of issues peculiar to the waterbody such that incidental take of manatees is inevitable regardless of protective measures implemented.

As such, the standard for identifying a waterbody as an "area with inadequate protection" is different than that for establishing a manatee protection area. This is why several areas proposed as manatee protection areas are not also "areas with inadequate protection."

Comment 8: Some commenters expressed concern that human safety could be compromised by forcing all boaters into narrow channels, bottlenecks, and other confined circumstances.

Response: We were very cognizant of human safety issues when we designed these manatee protection areas. While human safety is the responsibility of all vessel operators, we made sure that zone designations were consistent with accepted safe-designation practices and will ensure that all sign plans and signs meet Federal and State signage requirements to eliminate human safety concerns. Furthermore, most manatee refuge measures described in this final rule require vessels to proceed at slow speed and, as such, should enhance boater safety in these areas.

Comment 9: Some commenters expressed concern that human safety will be compromised by requiring vessel operators to proceed at slow speeds in the face of emergency situations, like rapidly approaching thunderstorms or medical emergencies.

Response: Federal regulations allow for an exemption to manatee protection area regulations in the event of emergency. Specifically, our regulations (50 CFR part 17.105(c)) state that "any person may engage in any activity otherwise prohibited by this subsection if such activity is reasonably necessary to prevent the loss of life or property due to weather conditions or other reasonably unforeseen circumstances, or to render necessary assistance to persons or property."

Comment 10: Several commenters noted that the size of the manatee population appears to have increased over time, and questioned the need for additional protective measures.

Response: A discussion of the current status of the manatee population is provided in the "Background" section. Two of the criteria for determining whether species are endangered or threatened under section 4(a) of the ESA are "(D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting its continued existence." (16 U.S.C. 1533(a)) There has been no confirmation

that significant threats to the species, including human-related mortality, injury, and harassment, and habitat alteration, have been reduced or eliminated. Furthermore, the MMPA sets a general moratorium for the taking of marine mammals. Regardless of the size or status of the manatee population, all takings are prohibited unless authorized under the MMPA.

Minimizing, to the extent practical, the taking of manatees as a result of watercraft collisions is a high priority in manatee recovery and management programs. Currently, the areas addressed in this rule have a significant potential for "take" and/or are characterized by limited current protective regulations.

Comment 11: Several commenters stated that we should focus on better enforcement of existing regulations before imposing additional restrictions on boaters.

Response: This issue was identified as one of the alternatives addressed within the Manatee Protection Area Environmental Assessment. While improvements in both the enforcement and education arenas are important to enhancing manatee protection, such improvements may be of little effect when applied to areas without regulations or with inadequate protection to minimize the take of manatees. The State has placed an increased emphasis on enforcement, and we have made a substantial commitment to enforcing manatee protection areas over the past few years. We anticipate that these efforts will continue.

Comment 12: Some commenters recommended that we abstain from designation of Federal manatee protection areas and allow the State and local authorities to provide for manatee protection.

Response: We are the Federal agency responsible for manatee management and protection activities under both the ESA and the MMPA. As such, we must take an active role in regulatory activities involving the manatee, including designating manatee refuges and sanctuaries. Furthermore, we must complete this rulemaking process, pursuant to our settlement agreement. This in no way diminishes the important role that State, local, and other Federal agencies play, or the role of the private sector. Recognition is given to both State and local efforts to establish manatee protection, and we are committed to supporting these efforts. We have stated that the State should have leadership in establishing additional manatee protection areas. With this final rule, we have focused on

sites where we determined that Federal action can effectively address the needs in the particular area.

Comment 13: Some commenters stated that the definition of "slow speed" is arbitrary and unenforceable, and recommended that we consider using some other standard, such as a "miles per hour" limit to regulate vessel speed.

Response: The definition of "slow speed" used in this rule is very similar to that used by the State in the Florida Manatee Sanctuary Act (F.A.C. 68C-22). This definition is generally understood by mariners and has proven to be enforceable. It is important to use a definition of "slow speed" that complements that used by the State. Ten of the sites included in this final rule are located in direct proximity to areas regulated by the State. The use of a similar definition will ensure consistency and lessen confusion among the boating public.

The establishment of another definition of "slow speed" or the use of a "miles per hour" speed zone poses many problems. Establishment of a "miles per hour" standard would necessitate all boats operating in these zones to be equipped with accurate speedometers. This standard would also require enforcement officers to procure equipment and attend periodic training to enforce these conditions. Of more importance is that boats operating at speeds in excess of what is allowed under the current definition of "slow speed" pose increased threats to manatees. Boats proceeding while "plowing the water" with elevated bows, such as occurs when a vessel is operating at greater than "slow speed," both obscure the forward vision of the operator and place the propulsion systems of the watercraft lower in the water. Both of these conditions increase the likelihood of a vessel collision with a manatee. With a subsequent increase of speed, the configuration of the vessel changes to one of planing. While this condition places the hull and outdrives of vessels higher in the water, it also decreases the reaction time available for both the operator and the manatee to detect one another and take action to avoid collision.

Comment 14: Many commenters stated that we have not adequately evaluated the economic impact of these designations.

Response: The economic analysis conducted as part of this rulemaking determined that these actions would not have a significant economic impact. Through the regulation promulgation process, including public hearings and comment periods, we sought comments

and information on activities known to occur at these sites. Based on these comments and sources of information, it is apparent that some users may be inconvenienced by the need to proceed at slower speeds or the need to use alternative sites. To address the concerns of adjoining property owners, we have provided exceptions to ensure that they are not adversely affected by these designations. As such, we believe that this rule will not result in a significant economic dislocation.

Comment 15: One commenter suggested that our proposed rule was contrary to the spirit and intent of Executive Order 12866, because we did not contact the commenter directly regarding the impact the proposed rule may have upon the individual's operations.

Response: As part of the rulemaking process, we published an advance notice of proposed rulemaking in which we solicited information from the public regarding issues that should be addressed through the rulemaking. We also held six public workshops that provided additional opportunities for the public to provide input and voice concerns. With publication of the proposed rule, we afforded a 60-day period for submitting written comments, and held four public hearings. Through the commenter's participation in this process, we are aware of the commenter's concerns. We have responded to those concerns to the best of our ability with this final rule and our intent to pursue amendments to our regulations. We have also updated the information regarding the economic effects of the rule, as appropriate, to reflect information submitted by the commenter. These actions meet the requirements of Executive Order 12866.

Comment 16: Many commenters suggested that technological advances may now make it possible for boaters and manatees to better detect the presence of one another and, thereby, avoid collisions, and recommended that these technologies be employed instead of restricting boat speeds.

Response: Ongoing research is evaluating the sensory abilities of the manatee and the environmental factors that may affect these abilities. Potential technologies may enable boaters to better detect the presence of manatees. However, no technology is currently available that is proven to be effective in avoiding collisions between manatees and boats. For the foreseeable future, detection and avoidance technology will likely be used to supplement, rather than replace, traditional management strategies.

Comment 17: Some commenters recommended that we selectively regulate watercraft and provide exemptions for those not responsible for take of manatees. These commenters stated that most watercraft-related manatee mortality is caused by large vessels and/or barges, and that boats without propellers do not harm manatees.

Response: The manatee mortality database contains information on the necropsy results of over 4,000 manatees. From this large information source, several interesting aspects of watercraft-related manatee mortality may be surmised. It is impossible to determine, in most cases, the size of the boat which struck a manatee. The exception to this is the very few cases where a responsible boater has reported a collision and researchers are able to compare the actual vessel to the observed injuries. In a few documented cases, manatees were obviously killed by a large vessel, the symptoms of which include massive crushing and or bifurcation (slicing into pieces) of the animal. The vast majority of cases involving watercraft-related mortality involve less dramatic injuries. Investigations comparing blade diameter and pitch indicate that the majority of manatees killed from watercraft-related collision are struck by smaller, fast-moving vessels.

Injuries to manatees from vessel impacts can be characterized as either lacerations or blunt trauma. Percentages generated by the mortality data-base indicate that 55 percent of the watercraft-related mortalities are the result of blunt trauma. Such trauma can result from impacts from vessel hulls, lower units, or other vessel components. Vessels without propellers (*e.g.*, personal watercraft) still have the potential to "take" manatees.

Comment 18: Some commenters recommended that we consider factors

such as water depth and the presence of aquatic vegetation when deciding the boundaries of manatee protection areas rather than base boundaries on unnatural features such as navigation channels or bank-to-bank designation of waterbodies.

Response: We considered such environmental features in evaluating potential manatee protection sites, because these factors influence manatee use of areas. There have been instances where habitat features (such as water depth) have been used to delineate boundaries of protection areas. The disadvantage of the use of such features for the purpose of this rule is the complexity and costs associated with such designs, and the potential for causing confusion among the regulated public resulting in poor compliance. Protection areas designed around environmental factors tend to be irregular and complex. This, in turn, results in significant increases in costs of implementation in terms of posting and the subsequent costs of maintenance. The limited resources available for this program required a less complex strategy for providing adequate protection for manatees and reasonable use of these areas by the public.

Comment 19: Commenters pointed out that a year-round, slow speed manatee refuge in the area of Pansy Bayou would preclude a local water ski program that practices and performs in the area and urged that we consider measures that would allow them to continue their activities.

Response: We are unable to adopt measures that would allow program participants to continue their activities in the context of this rule. We will address this request in a subsequent rulemaking that will re-describe the restricted activities or propose other means of resolving this issue while

providing sufficient protection for manatees.

Summary of Changes From the Proposed Rule

Pursuant to comments from the FWCC, various counties, and the public at large, we have made changes to the individual proposed manatee sanctuary and refuge designations to better coordinate with site-specific seasonal and areal limits, to improve consistency with local regulations, and to improve boater safety. In our proposed and emergency rules, we described the winter season to include that period from October 1 through March 31. Upon re-evaluation, it has become apparent that the modified November 15 through March 31 period better captures the time when manatees first appear and are most abundant at these sites; this period of time is also consistent with State and local regulations. As such, we have adopted this season for consistency, to reduce confusion potentially caused by the different timeframes, and at the same time, provide for adequate protection for manatees. Site-specific changes are described below, and summarized in Table 1. As can be seen in that table, the total of the areas designated as manatee protection areas by this rule is 2,562.84 hectares (6,333.10 acres).

We have also made some editorial changes to the regulations that set forth the Barge Canal and Sykes Creek Manatee Refuges. These two refuges were established by the final rule of January 7, 2002 (67 FR 680). We are making nonsubstantive changes to the text that sets forth these refuges simply to make subparagraphs (c)(1) and (c)(2) of 50 CFR 17.108 consistent with the new subparagraphs being added through this final rule—(c)(3) through (c)(11).

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Table 1. Summary of changes from the August 10, 2001, proposed rule and the final rule.

Site	County	Changes	Final Sanctuary Designation	Final Refuge Designation	Final Season	As Proposed Hectares (Acres)	Final Hectares (Acres)	Change in Hectares (Acres)
Blue Waters Manatee Sanctuary	Citrus	Changed from "No Entry, October 1 to March 31" to "No Entry, November 15 to March 31" for consistency with existing measures. (Reduced area, moved boundaries for consistency with existing State measures.)	No Entry	N/A	November 15 through March 31	1.70 (4.10)	0.67 (1.66)	-1.03 (-2.44)
Barlow Electric Generating Plant Manatee Sanctuary	Pinellas	Changed from "October 1 to March 31" to "November 15 to March 31" for consistency with existing measures. Reduced area; moved boundaries for consistency with existing County ordinance, to ensure ability to post on privately owned water bottoms, and to comply with permitting requirements.)	No Entry	N/A	November 15 through March 31	73.50 (181.50)	12.07 (29.82)	-61.43 (-151.68)
Tampa Electric Company's Big Bend Manatee Sanctuary	Hillsborough	Changed from "October 1 to March 31" to "November 15 to March 31" for consistency with existing measures. (Reduced area; moved boundaries for consistency with existing State and County measures, to ensure ability to post on privately owned water bottoms, and to comply with permitting requirements.)	No Entry	N/A	November 15 through March 31	30.80 (76.20)	12.08 (29.85)	-18.72 (-46.35)
Tampa Electric Company's Port Sutton Manatee Sanctuary	Hillsborough	Changed from "October 1 to March 31" to "November 15 to March 31" for consistency with existing measures.	No Entry	N/A	November 15 through March 31	1.10 (2.70)	1.10 (2.70)	No Change
South Gandy Navigation Channel Manatee Refuge	Pinellas	Withdrawn due to more protective existing County ordinance in area. (Includes year-round coverage, expanded area, good existing signage, and active enforcement. County exemptions parallel FWS exemption process.)				30.30 (74.80)	None	-30.30 (-74.80)
Tampa Electric Company's Big Bend Manatee Refuge	Hillsborough	Changed from "October 1 to March 31" to "November 15 to March 31" for consistency with existing measures. (Modified area, moved boundaries for privately owned water bottoms, and to comply with permitting requirements. Boundary movement included moving a portion of the aforementioned "Tampa Electric Company's Big Bend Manatee Sanctuary" occasionally used by foraging manatees into the refuge to ensure consistency with State regulations. Changing hectares/acreages also reflect a mapping error from the proposed rule which included uplands in the areal assessment.)	N/A	Idle Speed	November 15 through March 31	93.50 ¹ (230.90)	89.35 (220.79)	-4.15 (-10.11)
Tampa Electric Company's Port Sutton Manatee Refuge	Hillsborough	Changed from "October 1 to March 31" to "November 15 to March 31" for consistency with existing measures.	N/A	Idle Speed	November 15 through March 31	39.20 (96.90)	39.20 (96.90)	No Change
Pansy Bayou Manatee Refuge	Sarasota	None.	N/A	Slow Speed	Year-round	47.00 (116.10)	47.00 (116.10)	No Change

Blue Waters Manatee Sanctuary

In order to minimize confusion with a recently adopted FWCC protection area in Blue Waters and to promote boater safety, we have revised the area of our originally designated sanctuary to conform with the FWCC's designation. This reduction, from 1.7 hectares (ha) (4.1 acres), as originally proposed, to 0.67 ha (1.66 acres), entails removing protection from the spring boil to the northern limit of the newly described protection area and adding a shoreline buffer to the south of the re-configured northern sanctuary. These changes will not compromise manatee protection inasmuch as the public will be precluded in the areas upstream of the site through the site's "no entry" designation. We have also changed the period of protection from October 1 through March 31 to November 15 through March 31. This conforms with the period of highest manatee use, known manatee use areas on-site, is consistent with local seasonal measures, and minimizes confusion, thereby improving compliance with this measure.

Bartow Electric Generating Plant Manatee Sanctuary

Our manatee sanctuary has been reduced in size from 73.5 ha (181.5 acres), as originally proposed, to 12.07 ha (29.82 acres), and the boundaries and seasonal limits have been changed to provide consistency with local county measures. That portion of the sanctuary within the gated area of the Bartow outfall, where there is no access for manatees or the boating public, has been removed. Other areas included in our proposed rule were also dropped, in view of broader, existing Pinellas County protections in these areas, specifically, the county "combustion motor exclusion zone," in effect from November 15 through March 31. The manatee sanctuary was further focused to address harassment within the immediate area of the discharge. The boundary lines were re-drawn to promote consistency with the local ordinance and to minimize confusion to the public. Furthermore, the water bottoms are privately owned and we were advised by the property owner that they would have problems allowing us to place signs in the area if the signs did not support local ordinances, ordinances that they have strongly supported. The period of protection was changed from October 1 through March 31 to November 15 through March 31. This conforms to that period when manatees first appear in the area, periods of highest manatee use, is

consistent with local seasonal measures, and minimizes confusion, thereby improving compliance with this measure.

South Gandy Navigation Channel Manatee Refuge

Pinellas County adopted a regulatory zone within the South Gandy Navigation Channel that is more restrictive than ours. The county has designated the entire length of the channel as a "slow speed" area from its upper most reaches out into Tampa Bay. The measure protects manatees throughout the year from watercraft collisions in this high boat traffic area. The only exemptions to these regulations are for law enforcement officers and county officials who may exceed posted measures when conducting official business or for human safety and property concerns. There are no exemptions to these restrictions for the general public. The county has posted this area and is actively enforcing the zone. We have been advised by the county that their law enforcement officers have issued 43 citations and 82 warnings to violators since posting in March 2002. The county is also conducting a study, in conjunction with the State, to ensure the effectiveness of these conservation measures.

Our manatee refuge designation in this area, as described in the proposed and emergency rules, includes only a portion of the county's protection area and conflicts with the county's year-round designation. We have been advised by the FWCC Division of Law Enforcement that the adoption of a Federal sign plan that is inconsistent with local measures would preclude us from posting a Federal zone in this area and that they will not issue a permit that contradicts or confuses existing measures. Furthermore, the water bottoms are privately owned and we were advised by the property owner that they would have problems allowing us to place signs in the area if they did not support local ordinances, ordinances that they have strongly supported. Because of these issues and because the local ordinance is larger in area, is of longer duration (year-round instead of seasonal), provides the same type of protection (*i.e.*, slow speed), does not allow exceptions, and because we believe that the area will be adequately enforced, we are withdrawing our proposal and emergency designation at this site. We will, however, continue to monitor manatee take in this area. In the event that additional conservation measures are determined to be needed in Pinellas County, we will work with

the county to address these needs. If the existing conservation measures or any additional necessary conservation measures are not implemented, the Service will reconsider Federal designation again in the future.

Tampa Electric Company Big Bend Manatee Sanctuary

On Sept. 20th, 2002, we emergency-designated a manatee sanctuary in the Tampa Electric Company's Big Bend power plant discharge, in the approaches to the west, and in an area to the southeast of the discharge. We also emergency-designated a manatee refuge to the south of the discharge simultaneously. These measures were designed to enhance and improve consistency with new and existing protection measures in the area. Specifically, the FWCC designated the eastern end of the discharge canal as a no entry area, the approaches as a slow speed area, and the area to the south as a caution area. The county further designated year-round idle speed zones in the canals adjacent to our manatee refuge, a year-round idle speed zone at the point where the manatee refuge enters Tampa Bay, and year-round slow speed zones to the north and south of the manatee refuge entrance.

To accommodate these measures, we have modified our seasonal no entry zone (manatee sanctuary) to include that area inside the discharge canal. We have modified the manatee sanctuary at its western end because of the conflicting State and local regulations, which designate idle speed and slow speed measures in this area (such designations already minimize the likelihood of boat collisions with manatees using the approaches to these sites) during different times of the year. The manatee sanctuary is further modified at the southeast corner to ensure consistency with the State's actions; this site is occasionally used by foraging manatees and is now included in our manatee refuge designation. We have further been advised by the FWCC Division of Law Enforcement that the adoption of a Federal sign plan that is inconsistent with local measures would preclude us from posting a Federal zone in this area and that they will not issue a permit that contradicts or confuses existing measures.

These modifications have changed the area of this manatee sanctuary as originally proposed. The area of the original site included 30.8 ha (76.2 acres). Subsequent to the changes, the site now includes 12.08 ha (29.85 acres).

Tampa Electric Company Big Bend Manatee Refuge

Our manatee refuge has been modified to include the aforementioned portion of the proposed Tampa Electric Company Big Bend Manatee Sanctuary. While the addition of this portion of the manatee sanctuary will increase the effective area of our manatee refuge, the total area of the refuge appears to be decreasing. The original acreage inadvertently included portions of uplands in the southwest corner of the refuge. The original acreage should have been 76.05 ha (187.89 acres), a decrease of 17.45 ha (or 43.11 acres) from the originally proposed and emergency designated 93.5 ha (230.9 acres). We have added the acreage from the sanctuary and subtracted the upland acreage. As such, the area of this manatee refuge is now 89.35 ha (220.79 acres). We believe this modification provides equal, if not greater, protection for manatees.

Additionally, we have been advised by the FWCC Division of Law Enforcement that the adoption of a Federal sign plan that is inconsistent with local measures would preclude us from posting a Federal zone in this area and that they will not issue a permit that contradicts or confuses existing measures. As such, we have modified this area to conform to State and local measures to promote consistency with signage and regulations and to minimize confusion to the boating public.

Little Sarasota Bay Manatee Refuge

We have modified our original proposal, which designated this area as "slow speed, channel exempt," to require that watercraft not exceed 40 kilometers (km) per hour (25 miles per hour) in the channel so that we are consistent with more restrictive FWCC regulations in adjacent waters, to avoid confusion among boaters, and to promote boater safety. The FWCC designated sites to the north and south as "slow speed, 25 miles per hour in the channel" areas. Because this measure is more restrictive than our original "channel exempt" designation, we believe this modification will increase manatee protection at this site over our original proposal.

Lemon Bay Refuge

The FWCC has adopted a "slow speed, 25 miles per hour in the channel" manatee protection measure at this site. As such, we have modified our original proposal which designated this area as "slow speed, channel exempt" to require that watercraft not exceed 40 km per hour (25 miles per hour) in the

channel in order to be consistent with the more restrictive FWCC regulations, to avoid confusion among boaters, and to promote boater safety. We believe that this modification, which is more restrictive than our original proposal, will increase manatee protection at this site over our original proposal.

Peace River Manatee Refuge

The FWCC has adopted manatee protection measures that overlap and conflict with our original proposal. We have modified our designation to conform to the FWCC's manatee protection measures where we believe these changes do not reduce manatee protection. However, differences between our regulations and FWCC regulations remain.

The changes from our original proposal are as follows. We have reduced the extent of our slow speed zone between the U.S. Highway 41 and I-75 bridges to conform with the FWCC's 300-meters (1,000-foot) shoreline buffer zones. The area between the buffer zones has been designated to require boat operators to operate watercraft at speeds not to exceed 40 km per hour (25 miles per hour). We are changing the designation upstream of red channel marker 14, in Charlotte County just south of the DeSoto County line, from slow speed channel exempt to 40 km per hour (25 miles per hour) bank to bank; and, should the U.S. Coast Guard or the State mark a navigation channel or approve a marked navigation channel in an area approximately 1.6 km (1 mile) downstream of the railroad trestles in Shell Creek, we will allow watercraft to travel up to 40 km per hour (25 miles per hour) in the channel in this area as well.

We believe our final designation, modified from our original proposal, will provide adequate protection for manatees in the Peace River. This conclusion is based on a combination of manatee carcass recovery sites and sighting locations. This designation is very similar to the plan which was originally proposed for public review by the FWCC in May 2002, and is more protective than the plan which was ultimately approved. For example, the final FWCC action provides for an additional boat travel corridor in the lower portions of the river and reduced manatee protection in portions of Hunter Creek where there is significant manatee use. At this time, we are unable to accommodate all aspects of the FWCC's plan without reducing overall levels of manatee protection or making significant changes from our original proposal, changes that would require

additional public reviews. However, we will coordinate signage and posting plans with FWCC personnel to minimize confusion to the regulated public.

We have reduced the size of the original area from 4,892.00 ha (12,088.10 acres) to 1,698.11 ha (4,196.11 acres) because of a mapping error. This error included calculating the area of uplands within the Peace River flood plain and including this area in the size calculation for total area of the manatee refuge.

Haulover Canal Manatee Refuge

In our original proposal, we designated the canal and approaches (out to 0.8 km or 0.5 mile) as a slow speed manatee refuge. Subsequent to the proposal, the FWCC adopted manatee protection measures that overlap the approaches immediately east and west of the canal. We believe that the State measures in the approaches provide adequate protection for manatees. However, the FWCC did not include the canal proper in their rule. The canal proper, located on the Merritt Island National Wildlife Refuge, is currently designated as a slow speed area, pursuant to an existing national wildlife refuge designation, authorized under the National Wildlife Refuge Administration Act. This Act consolidated the authorities for areas administered by us, established the National Fish and Wildlife Refuge System, and provided that all property in the system shall be administered by us for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. We believe that our decision to protect this site through our ESA and MMPA authority increases manatee protection beyond that provided by the State and the National Wildlife Refuge designation, and improves the enforcement of the existing slow speed zones by making the legal restrictions consistent with those in other manatee protection areas (*i.e.*, protected under the ESA and MMPA). We believe the changes will not reduce protection of manatees from the measures originally proposed.

Areas Designated as Manatee Sanctuaries and Refuges

Blue Waters Manatee Sanctuary

We are establishing a seasonal manatee sanctuary, containing approximately 0.67 ha (1.66 acres), at the headwaters of the Homosassa River,

adjacent to the Homosassa Springs State Wildlife Park, commonly referred to as the Blue Waters, in Citrus County. All waterborne activities will be prohibited in this area from November 15 through March 31. Homosassa Springs State Wildlife Park, located directly upstream from the site, is not accessible to the manatees wintering at Blue Waters because the spring head is used to confine and treat distressed manatees.

The headwaters of the Homosassa River are an important wintering site for manatees (Service, unpublished data). The site is in close proximity to the Homosassa Spring, a Class 1 magnitude spring, which provides warm water from the Florida aquifer. This warm water is essential to the survival and well-being of a significant number of manatees during cold weather periods.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. These studies, begun in the late 1960s, have documented historical manatee use of the area (Hartman 1979). Initially, use was primarily associated with the springs during the winter. In recent years, however, manatees have become more common during the summer months, as documented through surveys and field observations (Joyce Kleen, Chassahowitzka National Wildlife Refuge, pers. comm. 2002). During the course of aerial surveys, a peak count of 123 manatees were sighted here on a single winter day (Joyce Kleen, pers. comm. 2002). Manatee deaths have been recorded in the area since 1974. Eight carcasses were recovered within 0.8 km (0.5 mile) of the site, including one from within the manatee sanctuary. Four of these were attributed to watercraft collision, including three watercraft-related deaths in the past five years. These deaths occurred between the months of November and March, that period when manatees are most abundant (Florida Marine Research Institute Manatee Mortality Database).

The presence of manatees, coupled with the shallow clear nature of the water, has attracted an increasingly large number of swimmers and divers to the site. These visitors come to the site to swim with manatees. The waters of the Homosassa River are currently regulated as a State-designated idle speed zone, and the State Park maintains a no-entry zone from a line approximately 61 meters (200 feet) upstream of the confluence of the spring run and the northeast fork of the river. These measures were recently enhanced by the FWCC, which adopted a rule designating this area as a seasonal no

entry area. The State will post this area prior to November 15, 2002 (Kipp Frohlich, pers. comm. 2002). The number of visitors has grown to the point where manatees are observed leaving the site and swimming downstream into colder waters (Gorzelay, Mote Marine Laboratory, pers. comm. 2001). The establishment of a manatee sanctuary at this location will provide wintering manatees with an undisturbed area free from harassment and will continue to provide the public with opportunities to interact with manatees outside of the protected area.

Bartow Electric Generating Plant Manatee Sanctuary

We are establishing a seasonal manatee sanctuary, containing approximately 12.07 ha (29.82 acres), at the warm water discharge of the Bartow Electric Generating Plant in Tampa Bay, Pinellas County. This seasonal closure will prohibit all waterborne activity at this site from November 15 through March 31, inclusive. We have designated this sanctuary based on observed manatee use patterns documented during cold weather periods (Hartman 1979, Wright *et al.* 2002, Weigle *et al.* 2001) and on observations of takings known to occur at warm water sites (Tyson 1998, Wooding 1997).

Warm water effluent from this plant attracts manatees during cold weather periods. The maximum manatee count at this site was 102 manatees on February 25, 1999 (FWCC, unpublished data). Similar to other warm water discharges, large numbers of fish are also attracted to the heated effluent at this site. As a result, both anglers and manatee enthusiasts are attracted to the site, leading to increased potential for cases of harm and harassment to manatees.

Researchers have documented boat operators, anglers, and swimmers disrupting wintering manatees in outfall areas. Boat operators maneuvering within manatee aggregations, anglers hooking manatees, and people pursuing manatees disturb and disperse these resting animals, at times forcing them into colder, life-threatening waters (Tyson 1998). Lethal takes are also known to occur—manatees have died from entanglement with fishing line and are vulnerable to boat collisions, especially in high speed unregulated areas (Florida Marine Research Institute Manatee Mortality Database 2002).

Tampa Electric Company's Big Bend Manatee Sanctuary

We are establishing a manatee sanctuary, containing approximately

12.08 ha (29.85 acres), at the Tampa Electric Company's Big Bend Electric Generating Station's discharge canal in Tampa Bay, Hillsborough County. This closure will prohibit all waterborne activity at this site from November 15 through March 31. We are also establishing a manatee refuge in the area south of this sanctuary (see "Tampa Electric Company's Big Bend Manatee Refuge" below).

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Two types of surveys have been used to document manatee use of this site. Synoptic surveys, conducted during the winter to provide minimum counts, have been conducted here since 1989. Per these surveys, the most manatees counted at this site was 316 on January 6, 2001 (FWCC, unpublished data). Distribution and abundance surveys, conducted in the area between November 1987 and June 1997, have documented 2,470 manatees using the site and its immediate surroundings throughout the year. Per these survey parameters, there were 510 sightings (a sighting may include multiple manatees) observed during the survey period. Observed activities primarily included resting manatees, followed by observations of traveling animals (Florida Marine Research Institute Aerial Survey Database). Fifteen carcasses were recovered from this area, including three carcasses recovered within the manatee sanctuary and 12 recovered within 0.8 km (0.5 mile) of the manatee sanctuary. These deaths, recorded since 1974, included five watercraft-related deaths, including two that occurred within the past five years. Deaths occurred between November and April (Florida Marine Research Institute Manatee Mortality Database).

We decided to establish this sanctuary based on observed manatee use patterns documented at this site (Wright *et al.* 2002, Weigle *et al.* 2001, Hartman 1979) and on observations of takings known to occur at this (FWCC, unpubl. data.) and other similar sites (Tyson 1998, Wooding 1997). Similar to other discharges, large numbers of fish and manatees are attracted to this heated effluent. As a result, both anglers and manatee enthusiasts are attracted to the site, leading to increased potential for cases of harm and harassment of manatees.

Researchers have documented boat operators, anglers, and swimmers disrupting manatees in outfall areas. Boat operators maneuvering within manatee aggregations, anglers hooking manatees, and people pursuing

manatees, disturb and disperse these resting animals, at times forcing them into colder, life-threatening waters (Tyson 1998). Lethal takes are also known to occur—manatees have died from entanglement with fishing line and are vulnerable to boat collisions, especially in high speed unregulated areas (Florida Marine Research Institute Manatee Mortality Database 2002).

There is currently a State-designated, seasonal, no-entry zone in the immediate vicinity of the Big Bend discharge. We believe that the zone is too small, however, to prevent harassment of manatees by fishermen, who cast into the aggregation area; therefore, we have designated a larger area. A larger manatee sanctuary at this site will improve the protection area and should adequately protect manatees from harassment from fishing and waterborne activities.

Tampa Electric Company's Big Bend Manatee Refuge

We are establishing a manatee refuge, encompassing approximately 89.35 ha (220.79 acres), in the waters adjacent to and south of the manatee sanctuary at the Tampa Electric Company's Big Bend Electric Generating Station on Tampa Bay in Hillsborough County to provide watercraft ingress and egress to the lagoon and canals in North Apollo Beach. Watercraft activity within this refuge will be regulated to idle speed from November 15 through March 31.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Distribution and abundance surveys, conducted in the area between November 1987 and June 1997, have documented 2,516 manatees using the site and its immediate surroundings throughout the year. Per these survey parameters, there were 538 sightings (a sighting may include multiple manatees) observed during the survey period. Observed activities primarily included resting manatees, followed by observations of traveling animals (Florida Marine Research Institute Aerial Survey Database). Eighteen manatee carcasses were recovered from this area, including five from within the manatee refuge and 13 within a 0.8 km (0.5 mile) radius of the site. These deaths, recorded since 1974, include six watercraft-related deaths, including two that occurred within the past five years. Deaths occurred throughout the year (Florida Marine Research Institute Manatee Mortality Database).

The likelihood of adverse manatee encounters with watercraft is increased in the vicinity of aggregation sites, such

as the warm water discharge of the Tampa Electric Company's Big Bend Electric Generating Station, because of the greater concentration of animals within these confined areas. Regulating this area as an idle-speed zone rather than as a sanctuary will afford watercraft ingress and egress through the area with a minimum anticipated adverse impact to manatees.

Port Sutton Manatee Sanctuary

We are establishing a seasonal manatee sanctuary, encompassing approximately 1.1 ha (2.7 acres), at the warm water discharge of the Tampa Electric Company's Gannon Electric Generating Station in Tampa Bay, Hillsborough County. This seasonal closure will prohibit all waterborne activity at this site from November 15 through March 31, inclusive. In addition, we are designating a manatee refuge in the area surrounding the sanctuary (see "Port Sutton Manatee Refuge" below). We have decided to establish this sanctuary based on observed manatee use patterns documented during cold weather periods when the plant was discharging warm water (Wright *et al.* 2002, Weigle *et al.* 2001, Hartman 1979) and on observations of takings known to occur at other warm water sites (Tyson 1998, Wooding 1997).

Warm water effluent from this plant has previously attracted manatees during cold weather periods. Similar to other warm water discharges, large numbers of fish are attracted to this heated effluent. As such, both anglers and manatee enthusiasts could be attracted to the site, leading to an increased potential for cases of harm and harassment to manatees. The area is presently closed to public access because of security concerns. However, the sanctuary designation will ensure adequate manatee protection should the area reopen in the future.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Two types of surveys have been used to document manatee use of this site. Synoptic surveys, conducted during the winter to provide minimum counts, have been conducted here since 1989. Per these surveys, between 25 and 50 manatees have been counted in this area (FWCC, unpublished data). Distribution and abundance surveys, conducted in the area between November 1987 and June 1997, have documented 106 manatees using the site and its immediate surroundings on a sporadic basis throughout the year. Per these survey parameters, there were 44

sightings (a sighting may include multiple manatees) observed during the survey period. Observed activities primarily included resting manatees, followed by observations of traveling animals (Florida Marine Research Institute Aerial Survey Database). Four manatee carcasses were recovered within a 0.8 km (0.5 mile) radius of the site. These deaths, recorded since 1974, included a single watercraft-related death and a death associated with cold. Deaths occurred in December, January, and May (Florida Marine Research Institute Manatee Mortality Database).

Researchers have documented boat operators, anglers, and swimmers disrupting wintering manatees in outfall areas. Boat operators maneuvering within manatee aggregations, anglers hooking manatees, and people pursuing manatees, disturb and disperse these resting animals, at times forcing them into colder, life-threatening waters (Tyson 1998). Lethal takes are also known to occur—manatees have died from entanglement with fishing line and are vulnerable to boat collisions, especially in high speed unregulated areas (FWCC, unpubl. data).

Hillsborough County has adopted a local ordinance designating this site as a seasonal slow speed manatee protection area from November 15 through March 31. The site has yet to be posted (Chuck Coleman, Hillsborough County, pers. comm. 2002).

Port Sutton Manatee Refuge

We are designating the Port Sutton area surrounding the manatee sanctuary at the Tampa Electric Company's Port Sutton (Gannon) Electric Generating Station, on Tampa Bay in Hillsborough County, as a manatee refuge. The refuge area includes approximately 39.2 ha (96.9 acres). Watercraft will be required to proceed at idle speed within this refuge from November 15 through March 31, inclusive.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Distribution and abundance surveys, conducted in the area between November 1987 and June 1997, have documented 148 manatees using the site and its immediate surroundings on a sporadic basis throughout the year. Per these survey parameters, there were 55 sightings (a sighting may include multiple manatees) observed during the survey period. Observed activities primarily included resting manatees, followed by observations of traveling animals (Florida Marine Research Institute Aerial Survey Database). Five manatee carcasses were recovered in

this area, including one within the manatee refuge. These deaths, recorded since 1974, included two watercraft-related deaths and a death associated with cold. Deaths occurred in December, January, March, and May (Florida Marine Research Institute Manatee Mortality Database).

The likelihood of adverse manatee encounters with watercraft is increased in the vicinity of wintering sites, such as the warm water outfall of the Tampa Electric Company's Port Sutton (Gannon) Electric Generating Station, because of the greater concentration of animals within these confined areas. Regulating this area as an idle-speed zone rather than as a sanctuary will afford watercraft ingress and egress through the area with a minimum anticipated adverse impact to manatees. The area is presently closed to public access because of security concerns related to potential terrorist activities. However, the sanctuary designation will ensure adequate manatee protection should the area reopen in the future.

Hillsborough County has adopted a local ordinance designating a small portion of this site as a seasonal slow speed manatee protection area (November 15 through March 31). The site has yet to be posted (Chuck Coleman, Hillsborough County, pers. comm. 2002).

Pansy Bayou Manatee Refuge

We are establishing a manatee refuge, containing approximately 47 ha (116.1 acres) in the northern Pansy Bayou area between City Island and the John Ringling Parkway Bridge on Sarasota Bay in Sarasota County, to regulate vessel traffic to slow speed year-round.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Distribution and abundance surveys, conducted in the area between 1985 and 1999, have documented 1,211 manatees using the site and its immediate surroundings throughout the year. Per these survey parameters, there were 533 sightings (a sighting may include multiple manatees) observed during the survey period. Observed activities primarily included traveling and resting manatees, followed by observations of feeding animals (Florida Marine Research Institute Aerial Survey Database). Shallow inshore waters in this area are typified by stands of sea grass. Seven manatee carcasses were recovered within a 0.8 km (0.5 mile) radius of the site; no carcasses were recovered on-site. These deaths, recorded since 1974, included a single watercraft-related death. Deaths

occurred in January, April, May, June, July, and August (Florida Marine Research Institute Manatee Mortality Database).

Pansy Bayou proper is currently closed under State law to all vessel traffic except residents, and serves as a manatee sanctuary. The site is currently used as a water-ski area, although recent action has been taken by the FWCC to designate the site as a slow speed area. This action has not yet been implemented. The remaining waters around the manatee refuge are currently designated by the State as slow speed (channel included) zones (F.A.C. 62N-22.026(2)(a)(4)). High-speed watercraft operation in this area poses a continuing threat to a substantial number of manatees. Establishment of a slow-speed zone will minimize the risk of manatee take due to disturbance and/or watercraft collisions.

Little Sarasota Bay Manatee Refuge

We are designating a manatee refuge, containing approximately 214.20 ha (529.40 acres), to control vessel speeds in the little Sarasota Bay area between the Blackburn Point Bridge and Intracoastal Waterway Channel Marker "40" in Sarasota County. The speed designation for this area will be slow speed, 40 km per hour (25 miles per hour) in the channel, year-round.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Distribution and abundance surveys, conducted in the area between November 1985 and June 1999, have documented 243 manatees using the site and its immediate surroundings on a sporadic basis throughout the year. Per these survey parameters, there were 122 sightings (a sighting may include multiple manatees) observed during the survey period. Observed activities primarily included traveling manatees, followed by observations of resting animals (Florida Marine Research Institute Aerial Survey Database). Two manatee carcasses were recovered within 0.8 km (0.5 mile) of the site boundaries. These deaths, recorded since 1974, include a watercraft-related death and a death involving a perinatal-class animal. Deaths occurred in July and November (Florida Marine Research Institute Manatee Mortality Database).

There are currently no speed zones in this portion of Sarasota County, although the State regulates the areas to the north and south of the site. The State designations include marked channels that allow for a maximum travel speed of 40 km per hour (25 miles per hour) within the channels. The

current unregulated nature of vessel operation at this site has high potential for resulting in manatee take.

Establishing a slow-speed zone outside of the main navigation channel will reduce the potential for take by limiting vessel speeds in those waters where manatees are most likely to occur.

Lemon Bay Manatee Refuge

We are establishing a manatee refuge, containing approximately 383.61 ha (948.06 acres), in Lemon Bay, Charlotte County, from the Charlotte County/Sarasota County boundary to a line approximately 1.6 km (1 mile) south of the Bay Road Bridge, for the purpose of regulating vessel speeds. Speeds will be restricted to slow speed, 40 km per hour (25 miles per hour) in the channel, year-round.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Distribution and abundance surveys, conducted in the area between 1987 and 1999, have documented 626 manatees using the site and its immediate surroundings throughout the year. Per these survey parameters, there were 356 sightings (a sighting may include multiple manatees) observed during the survey period. A high count of 13 animals was documented on November 4, 1994. Observed activities primarily included resting and feeding manatees, followed by observations of traveling animals (Florida Marine Research Institute Aerial Survey Database). Eleven carcasses were recovered from this area; six were recovered within the refuge and the remaining five were recovered within 0.8 km (0.5 mile) of the refuge boundaries. These deaths, recorded since 1974, include five watercraft-related deaths (two of these deaths occurred during the last five years). Deaths occurred between March and October (Florida Marine Research Institute Manatee Mortality Database).

There are currently no speed zones for manatee protection in this portion of Charlotte County, although the FWCC has recently adopted regulations to provide similar protection in this area. The State agency does not believe that the site will be posted until 2003 (Kipp Frohlich, pers. comm. 2002). The unregulated nature of this water body makes the taking of manatees very likely, due to the high speed at which watercraft currently travel through areas frequented by manatees. Establishing a slow-speed zone outside of the main navigation channel will reduce the likelihood of manatee take occurring.

Peace River Manatee Refuge

We are establishing a manatee refuge, containing 1,698.11 ha (4,196.11 acres) more or less, in the Peace River (located on the northeast corner of Charlotte Harbor) in Charlotte and De Soto Counties. This refuge will include the river and specific associated waters northeast of U.S. Highway 41. Waters within described areas will be regulated to allow watercraft to travel at a maximum speed of 40 km per hour (25 miles per hour), while other waters will be regulated to provide for slow-speed vessel operation. These regulations will be in effect year-round.

Described Areas Include

(a) Slow speed 300 meter (1,000 feet) shoreline buffers between the U.S. Highway 41 and I-75 bridges;

(b) slow speed outside of the marked navigation channel, 40 km per hour (25 miles per hour) in the marked channel, between the I-75 bridge and red channel marker "14";

(c) 40 km per hour (25 miles per hour), upstream of red channel marker "14";

(d) slow speed in Jim Long Lake, Hunter Creek, and Deep Creek; and

(e) slow speed in Shell Creek (if the U.S. Coast Guard or the State of Florida approve and designate a marked channel in this area, the channel may be designated as 40 km per hour (25 miles per hour) within the channel.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Distribution and abundance surveys, conducted in the area between 1987 and 1999, have documented 1,020 manatees using the site and its immediate surroundings throughout the year. Per these survey parameters, there were 504 sightings (a sighting may include multiple manatees) observed during the survey period. A high count of 15 animals was documented on July 2, 1998. Observed activities primarily included traveling and resting manatees, followed by observations of feeding animals. Animals were observed every month of the year (Florida Marine Research Institute Aerial Survey Database). Forty-nine manatee carcasses have been recovered in this area and 47 of these were recovered from within the refuge area. These deaths, recorded since 1974, include eleven watercraft-related deaths; three of these deaths occurred during the last five years. Deaths occurred in all months (Florida Marine Research Institute Manatee Mortality Database).

Manatee protection areas have recently been adopted by the FWCC

throughout much of this area. There are also local ordinances in effect in a small portion of this area. The State protection areas have yet to be posted and enforced. As a result, watercraft continue to travel at high speeds throughout many areas of the Peace River frequented by manatees. This refuge will slow vessel traffic in those portions of the Peace River where watercraft are most likely to encounter manatees, thereby reducing the likelihood of take.

Shell Island Manatee Refuge

We are establishing a manatee refuge, containing approximately 32.60 ha (80.50 acres), for the purpose of regulating vessel speeds at slow speed within the navigation channel that is located just north of Shell Island at the mouth of the Caloosahatchee River, Lee County. This regulation will be in effect year-round.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Distribution and abundance surveys, conducted in the area between 1984 and 1999, have documented 65 manatees using the site and its immediate surroundings. Per these survey parameters, there were 31 sightings (a sighting may include multiple manatees) observed during the survey period. A high count of 9 animals was documented on June 25, 1997. Observed activities primarily included traveling and resting manatees. Animals were observed sporadically throughout the year (Florida Marine Research Institute Aerial Survey Database). Sixteen manatee carcasses have been recovered in this area; three were recovered in the refuge and remaining 13 were recovered within 0.8 km (0.5 mile) of the refuge. These deaths, recorded since 1974, include five watercraft-related deaths. Two of these deaths occurred during the last five years. Deaths occurred in January, February, March, April, July, September, and November (Florida Marine Research Institute Manatee Mortality Database).

The site is located at the mouth of the Caloosahatchee River, which supports a large number of manatees. The Florida Power and Light electrical generating station, located on this river, is a major wintering refuge for manatees. On January 6, 2001, 434 manatees were observed there (Florida Marine Research Institute Aerial Survey Database). Most manatees using the Caloosahatchee River must pass through the Intracoastal Waterway navigation channel north of Shell Island when entering or exiting

the river. Similarly, the Shell Island channel is a significant travel corridor for vessels entering and leaving the Gulf and nearshore waters. This funneling of both watercraft traveling at high speed and manatees through a narrow channel has a high probability for take of manatees. A slow-speed zone will minimize the likelihood of manatee take occurring at this site.

The FWCC is currently promulgating a boating safety rule for this site. This rule would require boat operators to operate at slow speeds during the day time on week ends for boating safety purposes. Dates for completion of rule promulgation and sign posting are unknown at this time (Kipp Frohlich, pers. comm. 2002).

Haulover Canal Manatee Refuge

We are establishing a manatee refuge, containing approximately 8.95 ha (22.11 acres), within the confines of Haulover Canal, located at the north end of Merritt Island between the Indian River and Mosquito Lagoon, in Brevard County. Waters will be designated as slow speed, channel included, year-round.

Manatees moving between Mosquito Lagoon and the Indian River travel through Haulover Canal. These animals include a portion of the Atlantic coast sub population that uses northeast Florida and coastal Georgia, a sub population estimated to include as many as 300 individuals (Valade, Service, unpubl. data). Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Distribution and abundance surveys, conducted in the area between 1986 and 1999, have documented 209 manatees using the site and its immediate surroundings. Per these survey parameters, there were 73 sightings (a sighting may include multiple manatees) during the survey period. A high count of 13 animals was documented on October 16, 1997. Observed activities primarily included traveling and resting manatees, followed by observations of animals cavorting. Animals were observed throughout the year (Florida Marine Research Institute Aerial Survey Database). Nine carcasses were recovered in this area, including three from within the manatee refuge. The remaining six carcasses were collected within 0.8 km (0.5 mile) of the site. These deaths, recorded since 1974, include six watercraft-related deaths, including one that occurred this year. Deaths occurred in January, February, March, May, September, and December

(Florida Marine Research Institute Manatee Mortality Database).

The canal proper, located on the Merritt Island National Wildlife Refuge, is currently designated as a slow speed area, pursuant to an existing national wildlife refuge designation, authorized under the National Wildlife Refuge Administration Act. This Act consolidated the authorities for areas administered by us, established the National Fish and Wildlife Refuge System, and provided that all property in the System shall be administered by us for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. The canal approaches were recently designated as slow speed areas by the FWCC. The approaches have yet to be posted. Our adoption of the canal zone as a manatee refuge, pursuant to the ESA and MMPA, will improve enforcement capabilities and enhance the Merritt Island National Wildlife Refuge's efforts to protect manatees in this area. This final rule eliminates the protection areas from the approaches in deference to more extensive State measures. As a result, the proposed refuge has been reduced in size from 276.30 ha (682.70 acres) to 8.95 ha (22.11 acres).

Cocoa Beach Manatee Refuge

We are establishing a manatee refuge, containing approximately 23.9 ha (59.1 acres), to regulate vessel operation at slow speed year-round in the area adjacent to Municipal Park, just west of Cocoa Beach in the Banana River, in Brevard County.

Manatee presence has been documented in this area through aerial surveys, photo-identification studies, telemetry studies, and a carcass salvage program. Distribution and abundance surveys, conducted in the area between 1986 and 1999, have documented 99 manatees using the site and its immediate surroundings. Per these survey parameters, there were 47 sightings (a sighting may include multiple manatees) during the survey period. A high count of nine animals was documented on May 22, 1998. Observed activities primarily included traveling and feeding manatees, followed by observations of animals resting. The area contains significant sea grass beds and is consistently used as a foraging area by manatees. Animals were observed throughout the year (Florida Marine Research Institute Aerial Survey Database). Three carcasses were recovered from this area,

including one from the refuge proper. These deaths, recorded since 1974, include one watercraft-related death. Deaths occurred in April, July, and November (Florida Marine Research Institute Manatee Mortality Database).

The site was recently designated as a slow speed zone by the State; however, the site has yet to be posted. Given the use of the area by manatees, current high-speed vessel operation at this location has a high probability of resulting in the take of manatees. Requiring vessels to proceed at slow speed will minimize potential manatee takings.

Required Determinations

Regulatory Planning and Review

In accordance with the criteria in Executive Order 12866, this rule is not a significant regulatory action. OMB makes the final determination under Executive Order 12866.

a. This rule will not have an annual economic impact of \$100 million or adversely affect an economic sector, productivity, jobs, the environment, or other units of government. A cost-benefit analysis is not required. It is not expected that any significant economic impacts would result from the establishment of four manatee sanctuaries (64.03 acres) and nine manatee refuges (6,269.07 acres) in eight counties in the State of Florida.

The purpose of this rule is to establish 13 additional manatee protection areas in Florida. We are proposing to reduce the level of take of manatees by controlling human activity in four areas designated as manatee sanctuaries and nine areas designated as manatee refuges. Affected waterborne activities include swimming, diving, snorkeling, water skiing, surfing, fishing, the use of water vehicles, and dredge and fill activities. For the four areas designated as manatee sanctuaries, all waterborne activities will be prohibited from November 15 to March 31. For the nine areas designated as manatee refuges, the areas will be slow or idle speed zones with certain site-specific exceptions, including 40 km per hour (25 miles per hour) in some channels. The economic effect of these designations will be measured by the number of recreationists who use alternative sites for their activity or have a reduced quality of the waterborne activity experience at the designated sites. The State of Florida has 12,000 miles of rivers and 3 million acres of lakes so the designation of less than seven thousand acres, most of which is for lower speed zones, is unlikely to curtail any waterborne activity.

For boating recreationists, the inconvenience and extra time required to cross a slow speed zone will reduce the quality of the waterborne activity for some participants. The extra time required for commercial charter boats to reach fishing grounds could reduce on-site fishing time and could result in lower consumer surplus for the trip. The number of recreationists and charter boats using the designated sites is not known. The State of Florida has 943,611 registered boats but only those boats and recreationists using the designated sites will potentially be affected. However, since Florida has 12 thousand miles of rivers and streams and 3 million acres of lakes and ponds it is likely that only a small percentage of boat users will be affected by this rule. The current designation will cause some inconvenience in travel time over these areas but alternative sites within the proximity of the sanctuaries and refuges are available for all waterborne activities. Furthermore, none of the areas designated is the entire surface area of a water body. The un-designated parts of the water bodies are available for waterborne activities. Recreationists and commercial boaters may be inconvenienced by having to travel to an un-designated area but they are not prohibited from participating in any of the waterborne activities. Currently, there are no data sources identified that estimate the amount of recreational activity in and around the areas to be designated as either manatee sanctuaries or refuges. However, the majority (6,269.07 acres) of the areas being designated are for manatee refuges, which only require reduced speed. The 64.03 acres designated as manatee sanctuaries are part of larger water bodies where unrestricted waterborne recreational activity can take place. For these reasons, we believe that, although some inconvenience to the public may occur because of reduced travel speeds, the economic impact will not be significant.

b. This rule will not create inconsistencies with other agencies' actions. The precedent to establish manatee protection areas has been established primarily by State and local governments in Florida. We recognize the important role of State and local partners and continue to support and encourage State and local measures to improve manatee protection. We are designating areas where State and local governments have been unable to implement what we consider to be adequate measures. We have also focused the designation on those sites in which we have determined that Federal

action can effectively address the needs in the particular area, recognizing that we face certain resource limitations. We are eager to work with State and local agencies to develop and implement their own measures in the areas described in this final rule that would be equally protective of manatees and equally consistent with other measures, and thus would allow us to remove Federal designations and protections.

c. This rule will not materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. There are minimal restrictions to existing human uses of the proposed sites as a result of this rule, but the restriction is believed to enhance manatee viewing opportunities. No entitlements, grants, user fees, loan programs or the rights and obligations of their recipients are expected to occur.

d. This rule will not raise novel legal or policy issues. We have previously established other manatee protection areas.

Regulatory Flexibility Act

We certify that this rule will not have a significant economic effect on a substantial number of small entities as defined under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). An initial/final Regulatory Flexibility Analysis is not required. Accordingly, a Small Entity Compliance Guide is not required.

Selected economic characteristics of the affected counties are shown in Table 2. As can be seen in the table, the growth rate in per capita income is slower than the State average in Citrus, Brevard, Charlotte, and Lee Counties but the rate of growth in total personal income exceeds the State average except

in Brevard, De Soto, and Pinellas Counties where it is lower. Larger households account for the lower per capita income estimates in these counties. The proportion of total industry earnings coming from the amusements and recreation sector ranges from 0.5 percent in Brevard County to 2.7 percent in Sarasota County. All of these counties had the service sector as the largest economic contributor followed by retail trade and the real estate sectors, with the exception of De Soto County where retail trade is the largest economic contributor. Overall, the affected counties had only a small proportion of earnings coming from the amusement and recreation sector. As a result, a small impact to the recreation sector would not result in a significant effect on county-level income.

TABLE 2.—ECONOMIC CHARACTERISTICS OF THE EIGHT AFFECTED COUNTIES IN FLORIDA—1997

Affected Florida counties	Employment	Per capita personal income (dollars)	10 year rate of growth (dollars)	Personal income (\$000)	10 year rate of growth (dollars)	Total industry earnings (\$000)	Services industry earnings for amusements and recreation (\$000)	Percent of total
Sanctuaries:								
Citrus	35,663	\$18,493	3.9	\$2,060,167	6.9	\$793,347	\$6,650	0.8
Hillsborough	644,694	23,719	5.2	1,558,783	6.6	18,847,236	67,676	1.4
Pinellas	506,946	28,367	4.9	24,770,929	5.5	13,876,518	114,826	0.8
Refuges:								
Brevard	223,815	\$22,205	3.7	\$10,342,080	6.3	\$6,225,354	\$34,237	0.5
Charlotte	47,091	21,861	3.7	2,894,781	7.6	995,159	10,336	1.0
De Soto	11,977	18,968	5.2	469,998	6.3	251,421	1,644	0.7
Lee	196,448	25,568	4.4	9,862,900	7.3	4,848,936	61,103	1.3
Sarasota	169,984	35,654	5.2	10,706,931	6.8	4,239,034	114,742	2.7
State of Florida	8,032,538	\$24,799	4.5	\$363,979,647	6.6	220,985,959	4,255,304	1.9

Source: <http://govinfo.library.orst.edu/cgi-bin/reis-list>.

The employment characteristics of the eight affected counties are shown on Table 3. The latest available published data for the total number of establishments in SIC (Standard Industrial Classification) codes 09, 44, 59, 79, services, and not classified is 1997. These SIC codes represent establishments providing products associated with fishing, hunting, trapping, water transportation, miscellaneous retail, services, amusement and recreation services and nonclassifiable establishments. These are the establishments most likely to be directly associated with recreationists pursuing waterborne activities where manatees may be involved. As can be seen on Table 3, of the total number of establishments in these SIC codes, a large proportion employ less than nine

employees with the largest number of establishments employing less than four employees. If there are any economic impacts associated with this rule, they will affect some proportion of these small entities. Since the bulk of the acreage designated (6,269.07 acres) by this rule is for manatee refuges, which only require a reduction in speed, we do not believe the minor inconvenience caused by going slower in designated areas will cause more than an insignificant economic effect. The inconvenience may cause some recreationists to go to alternative sites which may cause some loss of income to some small businesses. However, the inconvenience is small so we believe that this will not be a significant economic dislocation. For the four areas designated as manatee sanctuaries

(64.03 acres), the restriction on human activity from November 15 to March 31 may cause some recreationists to go to alternative sites. The designated areas are relatively small and are part of large water bodies where there are large areas which do not restrict human activity. Recreationists can pursue waterborne activities in close proximity to the manatee sanctuaries without entering the sanctuaries. For this reason, we believe that there will be an insignificant economic effect from the designation of the areas as manatee sanctuaries. Without a significant change in recreationist use patterns there should be an equally insignificant change in business activity.

TABLE 3.—EMPLOYMENT CHARACTERISTICS OF THE EIGHT AFFECTED COUNTIES IN FLORIDA—1997 (INCLUDES SIC CODES 09, 44,59,79, SERVICES, AND NCE) ¹

Affected Florida counties	Mid-March employment	Total establishments	Number of establishments (1–4 employees)	Number of establishments (5–9 employees)	Number of establishments (10–19 employees)	Number of establishments (20 and over employees)
Sanctuaries:						
Citrus	8,926	1,281	807	244	120	110
Pinellas	197,842	12,852	7,954	2,344	1,226	1,328
Hillsborough	232,128	12,363	7,316	2,261	1,308	1,478
Refuges:						
Brevard	65,049	5,292	3,145	1,075	581	491
Charlotte	13,759	1,044	655	214	95	80
De Soto	4,648	186	121	38	18	10
Lee	63,411	4,977	3,061	930	494	492
Sarasota	73,819	5,125	3,231	936	473	485

Source: <http://govinfo.library.orst.edu/cgi-bin/reis-list>.

¹ SIC 09—Fishing, hunting, and trapping.
 SIC 44—Water transportation.
 SIC 59—Miscellaneous retail service divisions.
 SIC 79—Amusement and recreation services.
 NCE=non-classifiable establishments division.

Small Business Regulatory Enforcement Fairness Act

This rule is not a major rule under 5 U.S.C. 804(2). This rule:

a. Does not have an annual effect on the economy of \$100 million or more. As shown above, this rule may cause some inconvenience to recreationists because of speed restrictions in manatee refuge areas and seasonal or year-round closures in manatee sanctuaries, but this should not translate into any significant business reductions for the many small businesses in the eight affected counties. An unknown portion of the establishments shown on Table 3 could be affected by this rule. Because the restrictions on recreational activity are believed to be no more than an inconvenience for recreationists, we believe that any economic effect on small entities resulting from changes in recreational use patterns will be insignificant also.

b. Will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions. It is unlikely that there are unforeseen changes in costs or prices for consumers stemming from this rule. The charter boat industry may be affected with lower speed limits for some areas when traveling to and from fishing grounds. Based on an analysis of public comment, further refinement of the impact on this industry may be possible. We believe that it is unlikely that reduced speed limits and seasonal closures will result in a significant economic effect.

c. Does not have significant adverse effects on competition, employment,

investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. As stated above, this rule may generate some level of inconvenience to recreationists because of speed limits and seasonal closures, but it is believed to be minor and will not interfere with the normal operation of businesses in the affected counties. Added travel time to traverse some areas is not expected to be a major factor that will impact business activity.

Unfunded Mandates Reform Act

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.):

a. This rule will not “significantly or uniquely” affect small governments. A Small Government Agency Plan is not required. The designation of manatee refuges and sanctuaries imposes no new obligations on State or local governments.

b. This rule will not produce a Federal mandate of \$100 million or greater in any year, *i.e.*, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act.

Takings

In accordance with Executive Order 12630, the rule does not have significant takings implications. A takings implication assessment is not required. The manatee protection areas are located over State- or privately-owned submerged bottoms. Any property owners in the vicinity will have navigational access to and the wherewithal to maintain their property.

Federalism

In accordance with Executive Order 13132, the rule does not have significant Federalism effects. A Federalism assessment is not required. This rule will not have substantial direct effects on the State, in the relationship between the Federal Government and the State, or on the distribution of power and responsibilities among the various levels of government. As discussed earlier, we coordinated with the State of Florida to the extent possible on the development of this rule.

Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order.

Paperwork Reduction Act

This regulation does not contain collections of information that require approval by the Office of Management and Budget under 44 U.S.C. 3501 *et seq.* The regulation will not impose new recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations.

National Environmental Policy Act

We have analyzed this rule in accordance with the criteria of the National Environmental Policy Act. This rule does not constitute a major Federal action significantly affecting the quality of the human environment. An environmental assessment has been prepared and is available for review

upon request by writing to the Field Supervisor (see **ADDRESSES** section).

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), Executive Order 13175 and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with federally recognized Tribes on a Government-to-Government basis. We have evaluated possible effects of this rule on Federally recognized Indian tribes and have determined that there are no effects.

Energy Supply, Distribution or Use (Executive Order 13211)

On May 18, 2001, the President issued Executive Order 13211 on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Because this rule is not a significant regulatory action under Executive Order 12866 and it only requires vessels to either seasonally or completely avoid four areas (64.03 acres) or proceed at slow or idle speeds in 6,269.07 acres of waterways in Florida, it is not expected to significantly affect energy supplies, distribution, and use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

References Cited

A complete list of all references cited in this rule is available upon request from the Jacksonville Field Office (see **ADDRESSES** section).

Author

The primary author of this document is Jim Valade (see **ADDRESSES** section).

Authority

The authority to establish manatee protection areas is provided by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), and the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361–1407), as amended.

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as follows:

PART 17—[AMENDED]

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

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. Amend § 17.108 as follows:

- a. Revise the introductory text of paragraph (a);
- b. Permanently designate the Kings Bay map at its current location

following paragraph (a)(7) and revise the note to precede the map;

c. Revise paragraphs (a)(8) through (a)(11);

d. Revise paragraphs (b) and (c)(1) through (c)(5);

e. Add paragraphs (c)(6) through (c)(11).

The revised and added text reads as follows:

§ 17.108 List of designated manatee protection areas.

(a) *Manatee sanctuaries.* The following areas are designated as manatee sanctuaries. All waterborne activities are prohibited in these areas during the period November 15–March 31 of each year. The areas which will be posted are described as follows:

* * * * *

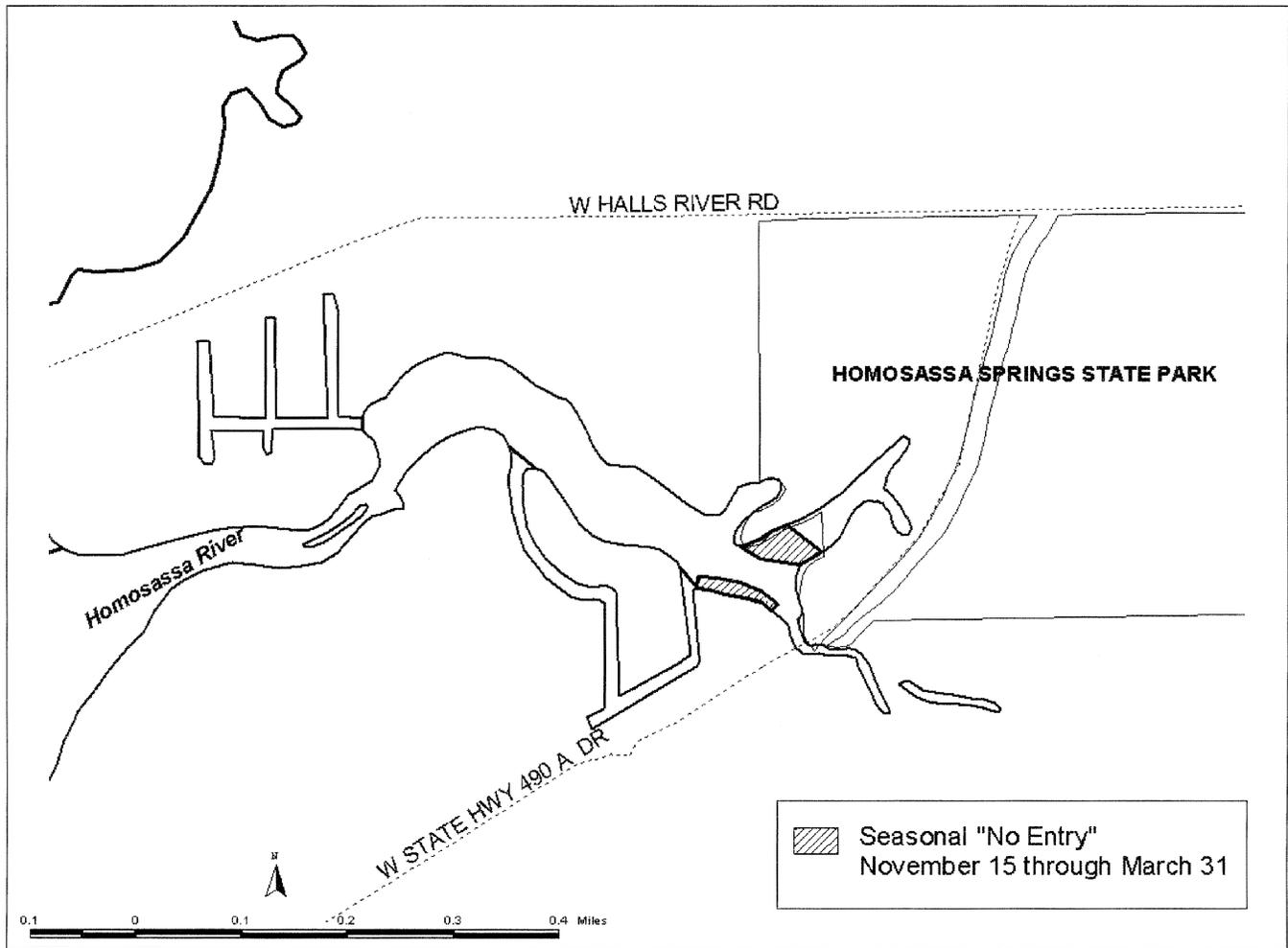
(7) * * *

Note: Map for paragraphs (a)(1) through (a)(7) follows:

* * * * *

(8) That part of the Homosassa River, Homosassa, Citrus County, Florida, within Section 28, Township 19 South, Range 17 East, described as the headwaters of the Homosassa River (adjacent to the Homosassa Springs State Wildlife Park), including the spring run at the point where the run enters the northeast fork of the river along the southeastern shore and an area opposite this site along the southern shoreline; containing approximately 0.67 ha (1.66 acres). Map follows (see Blue Waters Manatee Sanctuary):

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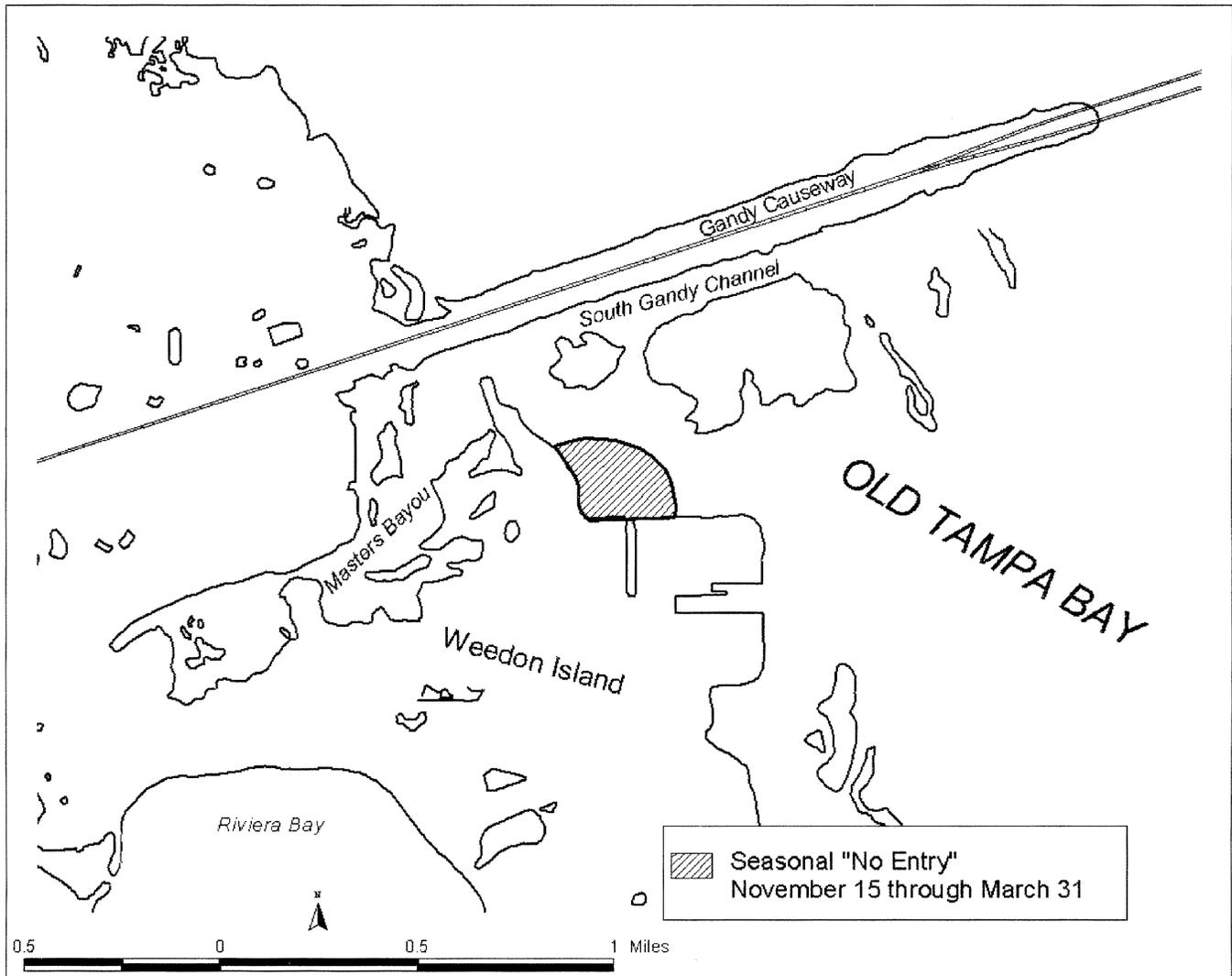


Blue Waters Manatee Sanctuary

(9) That part of Tampa Bay, St. Petersburg, Pinellas County, Florida, within Sections 16 and 21, Township 30 South, Range 17 East, described as the warm-water outflow of the Bartow Electric Generating Plant located on the

northern shore of Weedon Island, encircling that point where the discharge enters receiving waters along the western shore of Old Tampa Bay; to be known as the Bartow Electric Generating Plant Manatee Sanctuary,

containing approximately 12.07 ha (29.82 acres). Map follows (see Bartow Electric Generating Plant Manatee Sanctuary):

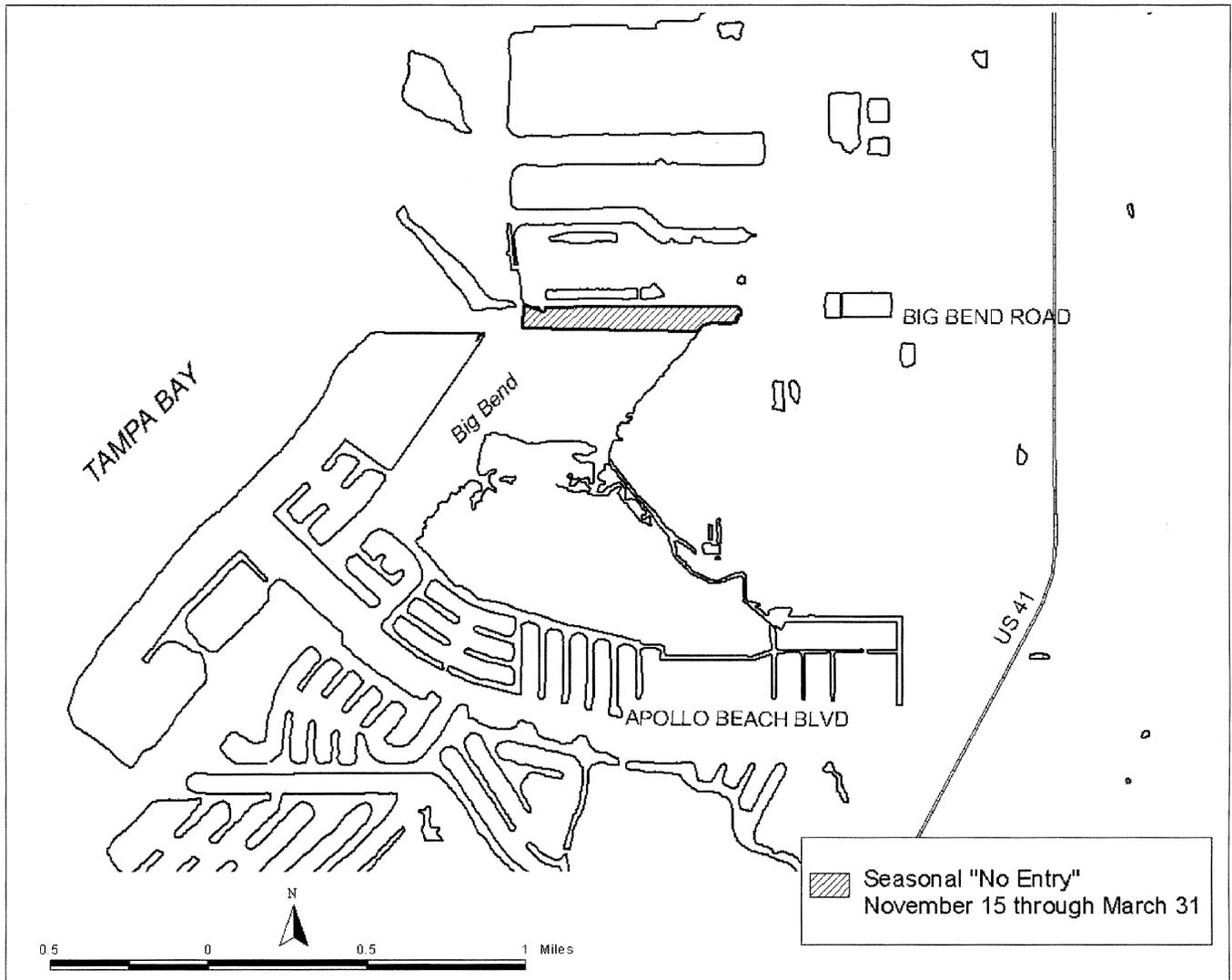


Bartow Electric Generating Plant Manatee Sanctuary

(10) That part of Tampa Bay, Tampa, Hillsborough County, Florida, within Sections 10 and 15, Township 31 South, Range 19 East, described as the waters in and around the warm-water outflow

of the Tampa Electric Company Big Bend Electric Generating Station located west of Jackson Branch and including the Big Bend area of eastern Tampa Bay, to be known as the Tampa Electric

Company Big Bend Manatee Sanctuary, containing approximately 12.08 ha (29.85 acres). Map follows (See TECO Big Bend Manatee Sanctuary):

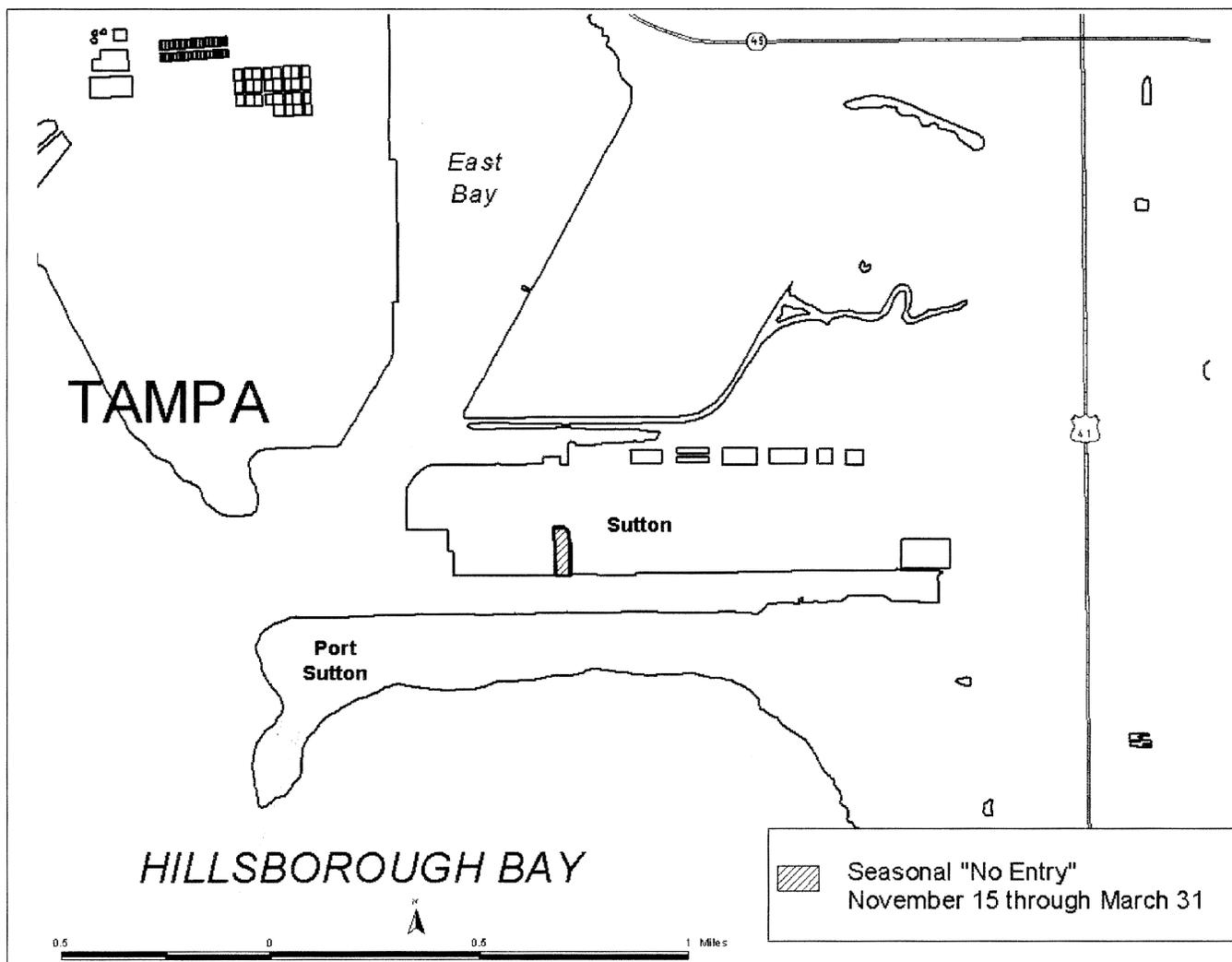


TECO Big Bend Manatee Sanctuary

(11) That part of Tampa Bay, Tampa, Hillsborough County, Florida, lying within Section 4, Township 30 South, Range 19 East, described as the warm-

water outflow of the Tampa Electric Company Gannon Electric Generating Station, to be known as the Port Sutton Manatee Sanctuary, containing

approximately 1.1 ha (2.7 acres). Map follows (see Port Sutton Manatee Sanctuary):



Port Sutton Manatee Sanctuary

(b) *Exceptions*—(1) *Exception for residents adjoining the areas described in paragraphs (a)(1) through (a)(7) of this section.* Watercraft access to private residences, boat houses, and boat docks through these sanctuaries by the residents and their authorized guests is permitted. Any such authorized boating activity must be conducted by operating watercraft at idle speed/no wake. Residents' watercraft will be identified by the placement of a sticker provided by the Fish and Wildlife Service in a conspicuous location on each vessel. Use of the waters within the sanctuaries by watercraft will be only for the purpose of access to residences and the storage of such watercraft in waters adjacent to residences.

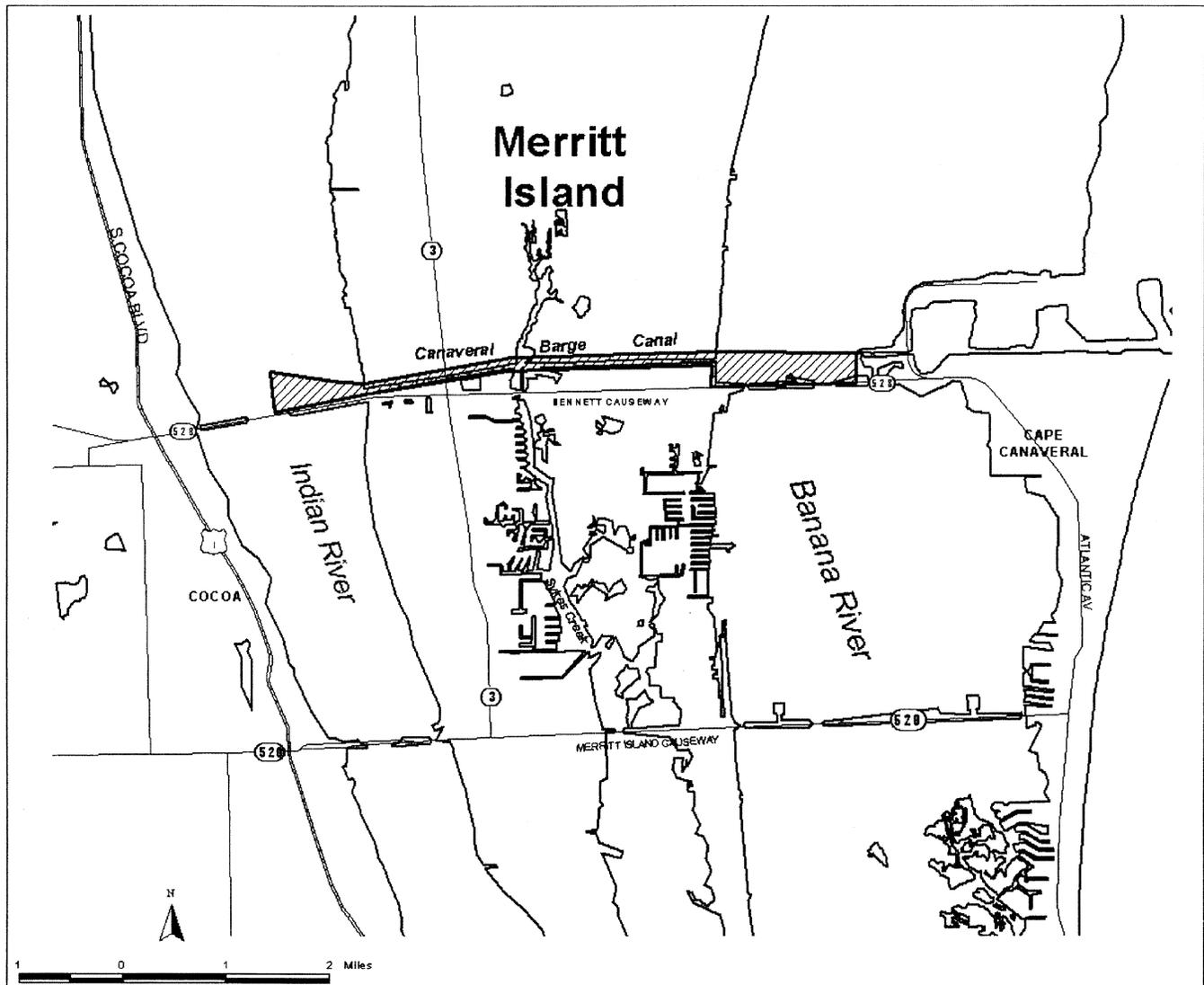
(2) *Exception for publicly and privately owned property adjoining the areas described in paragraphs (a)(8) through (a)(11) of this section.* Watercraft access and property maintenance activities within sanctuaries by property owners, their employees, and designees are permitted. Any such authorized boating activity must be conducted by operating watercraft at idle speed. Watercraft will be identified by the placement of a sticker provided by the Fish and Wildlife Service in a conspicuous location on each boat or by other means. Maintenance activities include those actions necessary to maintain property and waterways, subject to any Federal, State, and local government permitting requirements.

(c) * * *

(1) *The Barge Canal Manatee Refuge.*
 (i) The Barge Canal Manatee Refuge is described as all waters lying within the banks of the Barge Canal, Brevard County, Florida, including all waters lying within the marked channel in the Banana River that lie between the east entrance of the Barge Canal and the Canaveral Locks; containing approximately 276.3 ha (682.7 acres).

(ii) Watercraft are required to proceed at slow speed (channel included) all year. The use of watercraft at speeds greater than slow speed is prohibited throughout the Barge Canal Manatee Refuge.

(iii) Map of the Barge Canal Manatee Refuge follows:



Barge Canal Manatee Refuge

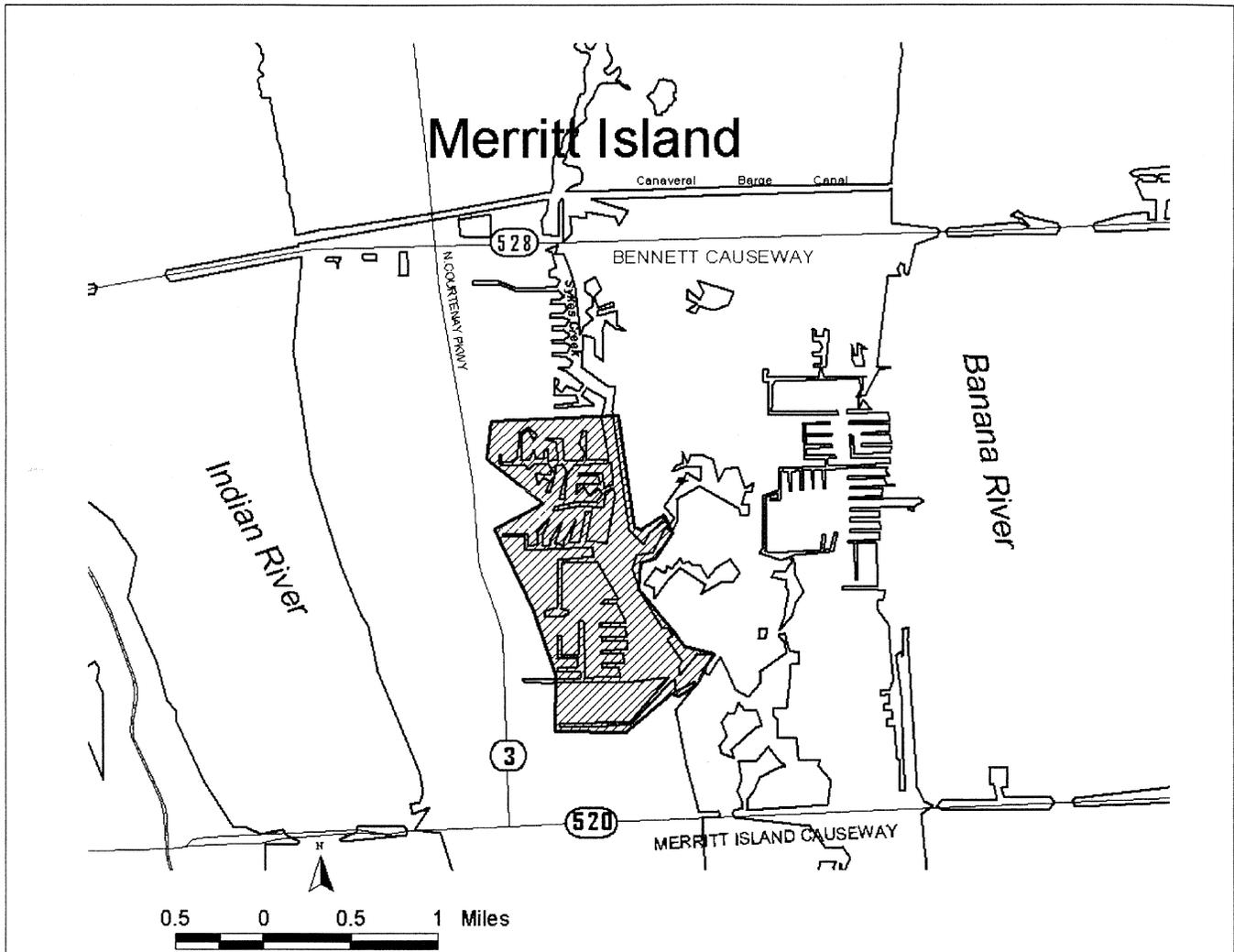
(2) *The Sykes Creek Manatee Refuge.*

(i) The Sykes Creek Manatee Refuge is described as all waters, including the marked channel in Sykes Creek, Brevard County, Florida. In particular, the portion of Sykes Creek southerly of the southern boundary of that portion of the creek commonly known as the "S"

curve (said boundary being a line bearing east from a point on the western shoreline of Sykes Creek at approximate latitude 28 degrees 23'24" N, approximate longitude 80 degrees 41'27" W) and northerly of the Sykes Creek Parkway; containing approximately 342.3 ha (845.8 acres).

(ii) Watercraft are required to proceed at slow speed (channel included) all year. The use of watercraft at speeds greater than slow speed is prohibited throughout the Sykes Creek Manatee Refuge.

(iii) Map of the Sykes Creek Manatee Refuge follows:



Sykes Creek Manatee Refuge

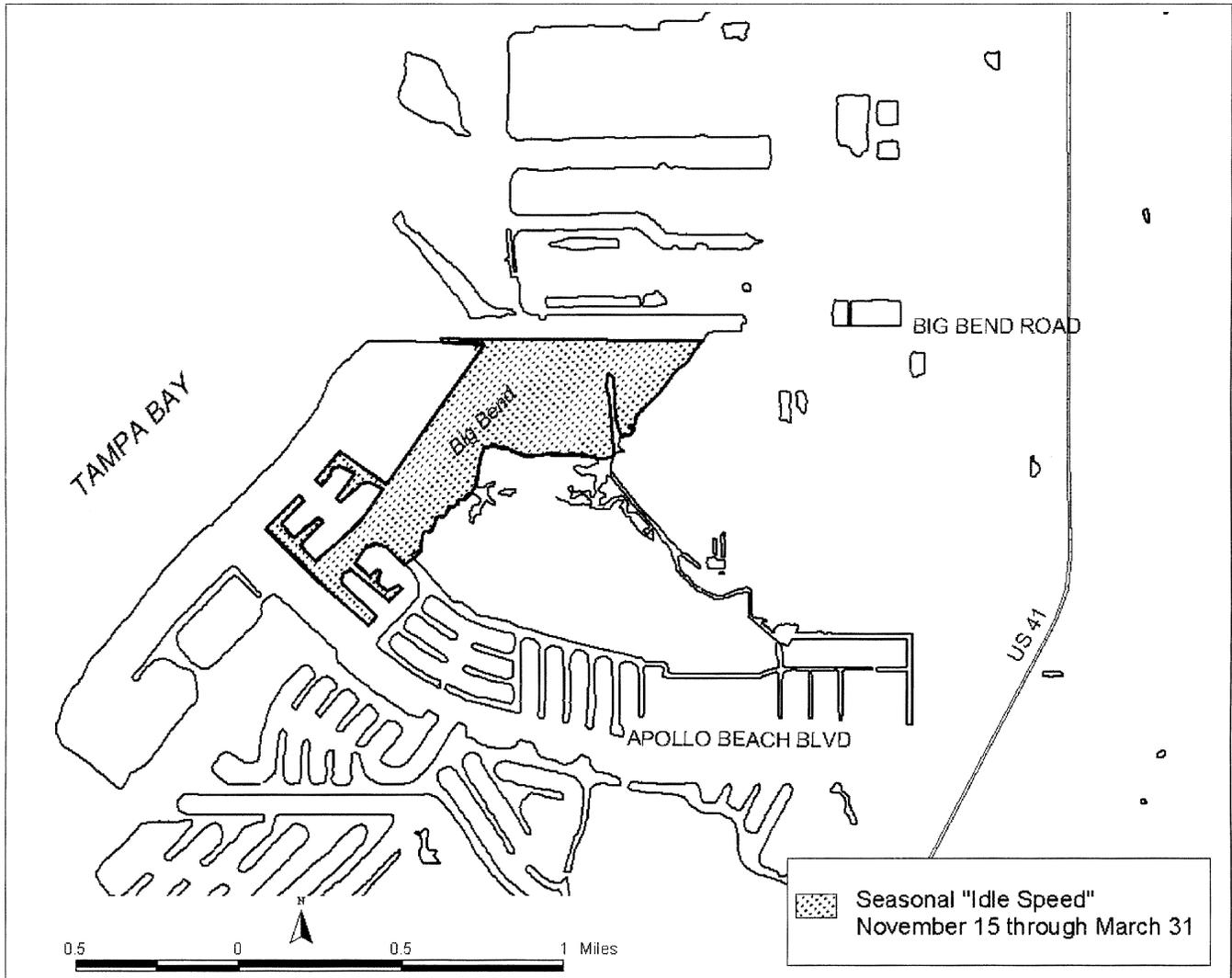
(3) *The Tampa Electric Company's Big Bend Manatee Refuge.* (i) The Tampa Electric Company's Big Bend Manatee Refuge is described as the entrance channel and those waters south of the manatee sanctuary at the Tampa Electric Company's Big Bend

Electric Generating Station within Hillsborough County, Florida; containing approximately 89.35 ha (220.79 acres).

(ii) Watercraft are required to operate at idle speed from November 15 through March 31. Watercraft are prohibited

from operating at speeds greater than idle speed from November 15 through March 31, inclusive.

(iii) Map of the Tampa Electric Company's Big Bend Manatee Refuge follows (see TECO Big Bend Manatee Refuge):



TECO Big Bend Manatee Refuge

(4) *The Port Sutton Manatee Refuge.*

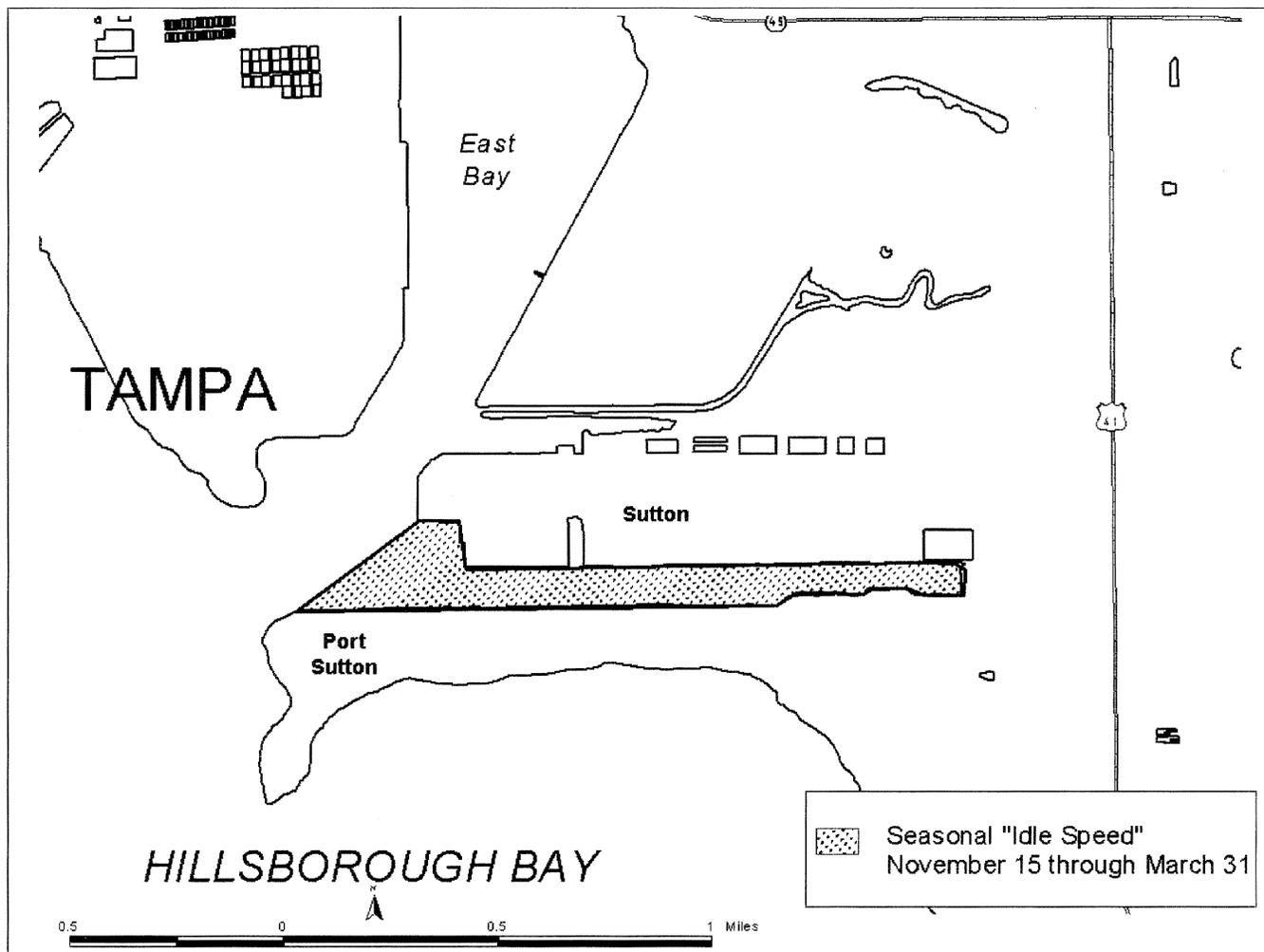
(i) The Port Sutton Manatee Refuge is described as those waters surrounding the Port Sutton Manatee Sanctuary, including all waters within Port Sutton, Hillsborough County, Florida;

containing approximately 39.2 ha (96.9 acres).

(ii) Watercraft are required to operate at idle speed from November 15 through March 31, inclusive. Watercraft are prohibited from operating at speeds

greater than idle speed from November 15 through March 31, inclusive.

(iii) Map of Port Sutton Manatee Refuge follows (see Port Sutton Manatee Refuge):

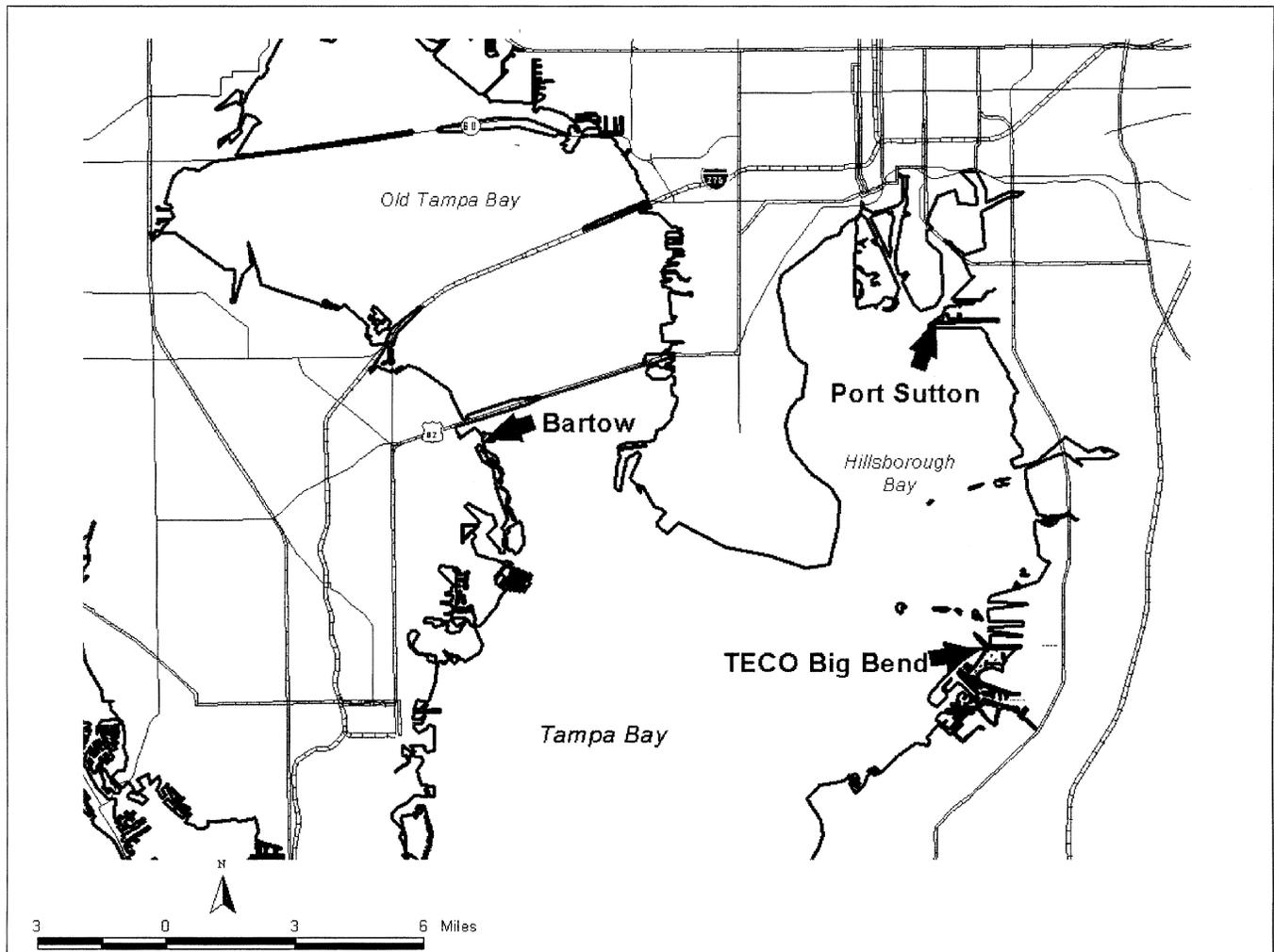


Port Sutton Manatee Refuge

(iv) Map showing the relative locations of the Bartow, TECO Big Bend,

and Port Sutton areas of Tampa Bay

follows (see Tampa Bay Manatee Sanctuaries and Refuges):



Tampa Bay Manatee Sanctuaries and Refuges

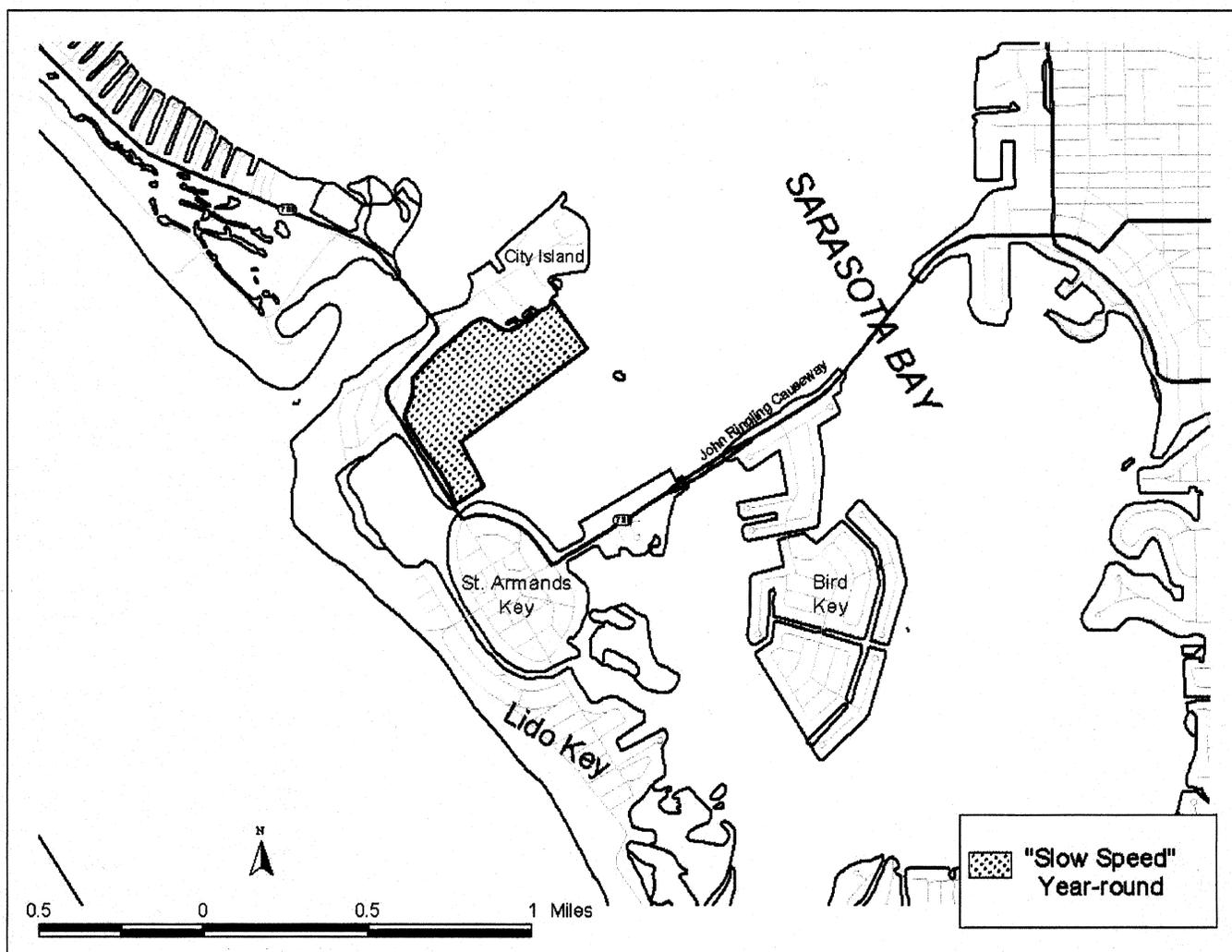
(5) The Pansy Bayou Manatee Refuge.
 (i) The Pansy Bayou Manatee Refuge is described as that portion of Sarasota Bay, Sarasota County, Florida, lying northwesterly of a line 45.7 meters (150 feet) northwesterly of and parallel with a line perpendicular to the John Ringling Parkway Bridge connecting St. Armands Key to City Island from the northwesterly end of said bridge, southwesterly of a line 228.6 meters (750 feet) northeasterly of and parallel

with the centerline of the John Ringling Parkway (running northwesterly from St. Armands Key), northwesterly of a line 320 meters (1,050 feet) northwesterly of and parallel with a line perpendicular to the aforementioned John Ringling Parkway Bridge connecting St. Armands Key to City Island from the northwesterly end of said bridge, and southwesterly of a line 990.6 meters (3,250 feet) northeasterly of and parallel with the centerline of the

aforementioned John Ringling Parkway (running Northwesterly from St. Armands Key); containing approximately 47 ha (116.1 acres).

(ii) Watercraft are required to proceed at slow speed year-round. Watercraft are prohibited from operating in excess of slow speed throughout the year in this area.

(iii) Map of the Pansy Bayou Manatee Refuge follows (See Pansy Bayou Manatee Refuge):



Pansy Bayou Manatee Refuge

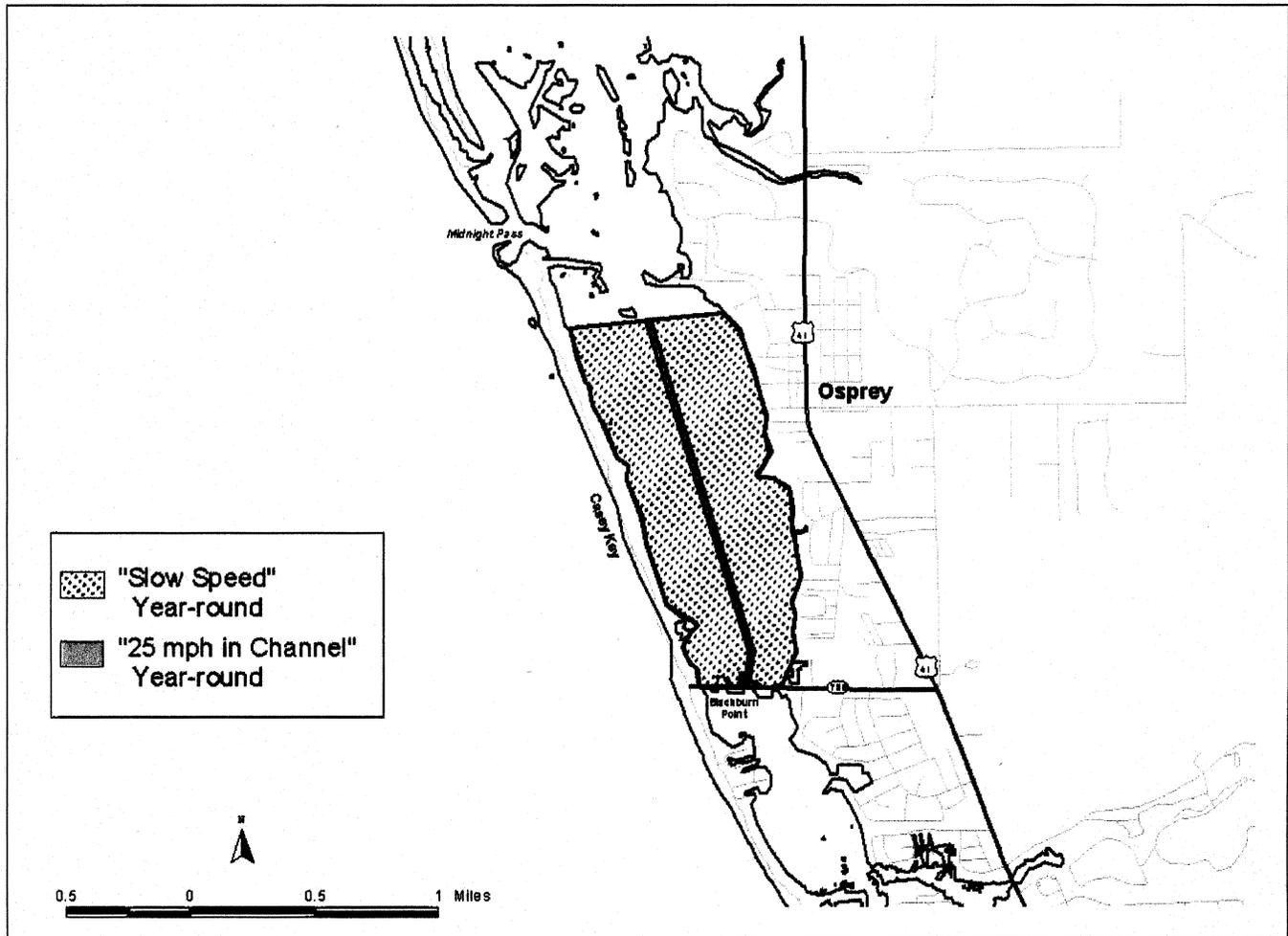
(6) *The Little Sarasota Bay Manatee Refuge.* (i) The Little Sarasota Bay Manatee Refuge is described as those waters lying southerly of a line that bears north 90 degrees 00'00" E (true) and runs through the southerly tip of the first unnamed island south of Red Intracoastal Waterway Channel Marker "40" (latitude 27 degrees 10' 07" N,

longitude 82 degrees 30' 05" W) and those waters lying northerly of the Blackburn Point Bridge, Sarasota County, Florida; containing approximately 214.2 ha (529.40 acres).

(ii) Watercraft are required to proceed at slow speed, 40 kilometers per hour (25 miles per hour) within the channel, year-round. Watercraft are prohibited

from operating in excess of slow speed outside of the channel and operating at speeds in excess of 40 kilometers per hour (25 miles per hour) within the channel, year-round.

(iii) Map of the Little Sarasota Bay Manatee Refuge follows (see Little Sarasota Bay Manatee Refuge):



Little Sarasota Bay Manatee Refuge

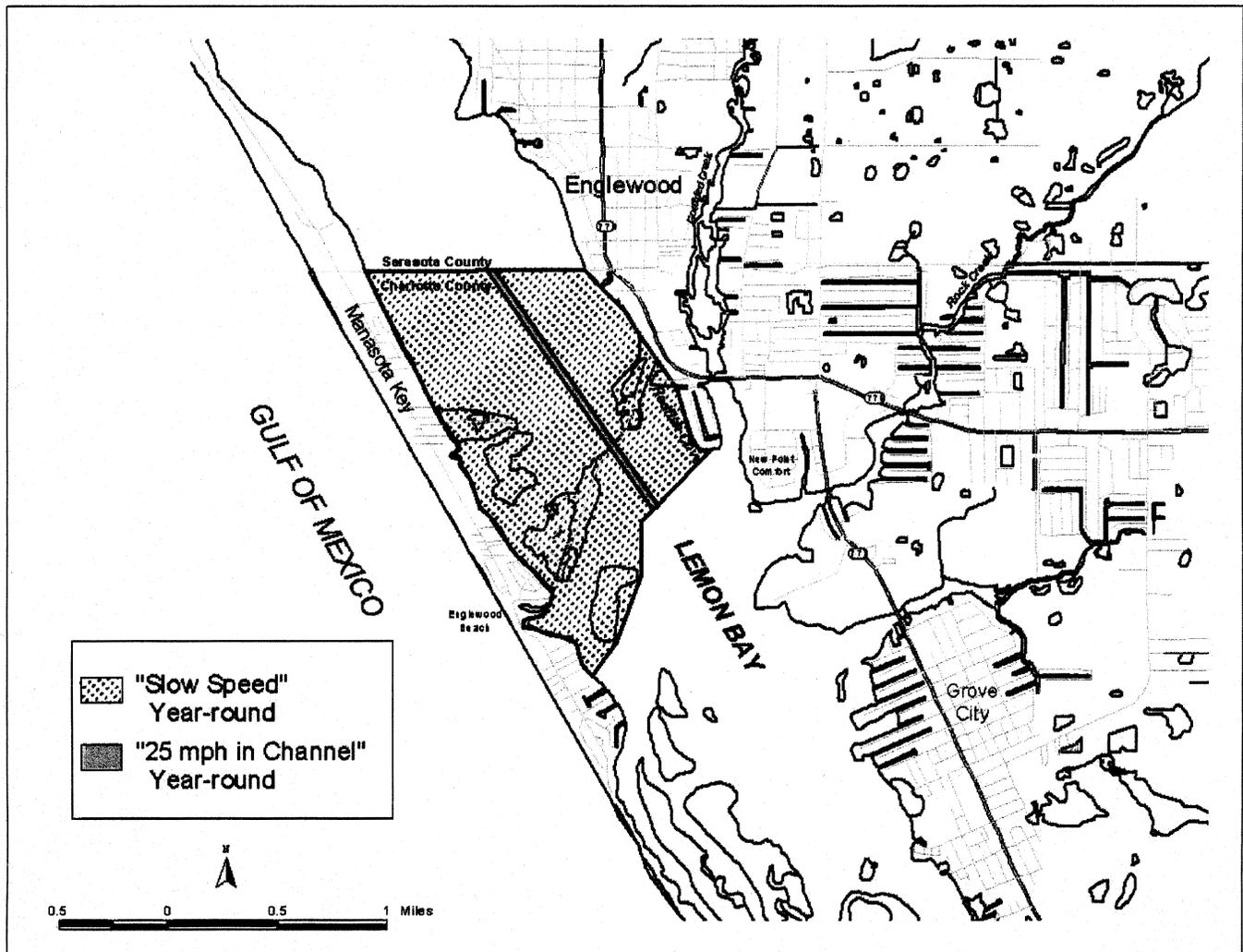
(7) *The Lemon Bay Manatee Refuge.*
 (i) The Lemon Bay Manatee Refuge is described as those waters of Lemon Bay lying south of the Sarasota/Charlotte County, Florida, boundary and north of a line north 60 degrees 14'00" E (true) parallel with a series of small islands approximately 1.6 kilometer (1 mile)

south of the Bay Road Bridge; containing approximately 383.61 ha (948.06 acres).

(ii) Watercraft are required to proceed at slow speed, 40 kilometers per hour (25 miles per hour) within the channel, year-round. Watercraft are prohibited from operating in excess of slow speed

outside of the channel and operating at speeds in excess of 40 kilometers per hour (25 miles per hour) within the channel, year-round.

(iii) Map of the Lemon Bay Manatee Refuge follows (see Lemon Bay Manatee Refuge):



Lemon Bay Manatee Refuge

(8) *The Peace River Manatee Refuge.*

(i) The Peace River Manatee Refuge is described as all waters of the Peace River and certain associated water bodies north and east of the U.S. Highway 41, Charlotte and De Soto Counties, Florida; containing approximately 1,698.11 ha (4,196.11 acres).

(ii) In the Peace River in Charlotte County, watercraft are required to travel at slow speed within a posted shoreline buffer between the US Highway 41 and I-75 bridges. The buffer is approximately 300 meters (1,000 feet) from shore except in a slightly larger area north and west of I-75 to be consistent with recently adopted Florida Fish and Wildlife Conservation Commission's regulations. Watercraft are allowed to travel at a maximum speed of 40 kilometers per hour (25 miles per hour) year-round outside the buffer. Watercraft are prohibited from

traveling in excess of slow speed within the posted shoreline buffer between the U.S. Highway 41 and I-75 bridges and are further prohibited from operating in excess of 40 kilometers per hour (25 miles per hour) outside the buffer throughout the year.

(iii) In the Peace River within Charlotte County and upstream of I-75 to red channel marker "14," watercraft are required to travel at slow speed outside of the marked navigation channel. Watercraft are allowed to travel at a maximum speed of 40 kilometers per hour (25 miles per hour) year-round inside the marked navigation channel. Watercraft are prohibited from traveling in excess of slow speed in areas outside of the navigation channel and are further prohibited from traveling in excess of 40 kilometers per hour (25 miles per hour) inside the marked navigation channel, year-round.

(iv) In the waters of the Peace River in Charlotte and De Soto Counties upstream of red channel marker "14," watercraft are allowed to travel at a maximum speed of 40 kilometers per hour (25 miles per hour) year-round. Watercraft are prohibited from traveling in excess of 40 kilometers per hour (25 miles per hour), year-round, in this area.

(v) Within the waters of Jim Long Lake and Hunter Creek in Charlotte and De Soto Counties, watercraft are required to travel at slow speed year-round. Watercraft are prohibited from traveling in excess of slow speed in this area, year-round.

(vi) Within the waters of Deep Creek in Charlotte and De Soto Counties, watercraft are required to travel at slow speed year-round. Watercraft are prohibited from traveling in excess of slow speed in this area, year-round.

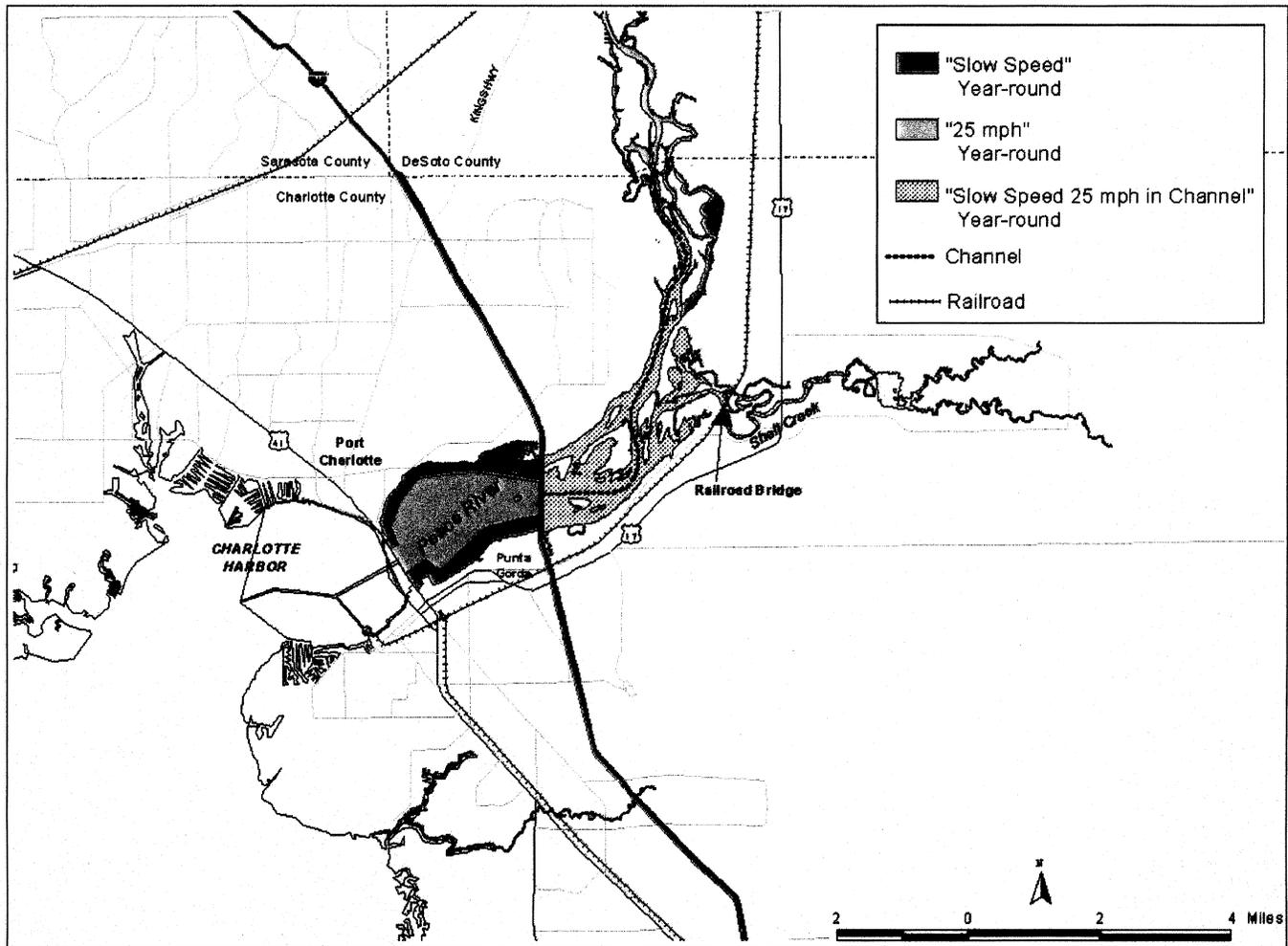
(vii) Within the waters of Shell Creek in Charlotte County, watercraft are

required to travel at slow speed year-round with the following exception. Should a U.S. Coast Guard or State of Florida approved marked navigation channel be established in that portion of Shell Creek approximately 1.6 kilometers (1 mile) downstream of the

Seaboard Railroad trestles, watercraft will be allowed to travel at a maximum speed of 40 kilometers per hour (25 miles per hour) in this section of Shell Creek upon posting by the Fish and Wildlife Service or the Florida Fish and Wildlife Conservation Commission.

Watercraft are prohibited from traveling in excess of slow speed in this area, year-round.

(viii) Map of the Peace River Manatee Refuge follows (see Peace River Manatee Refuge):



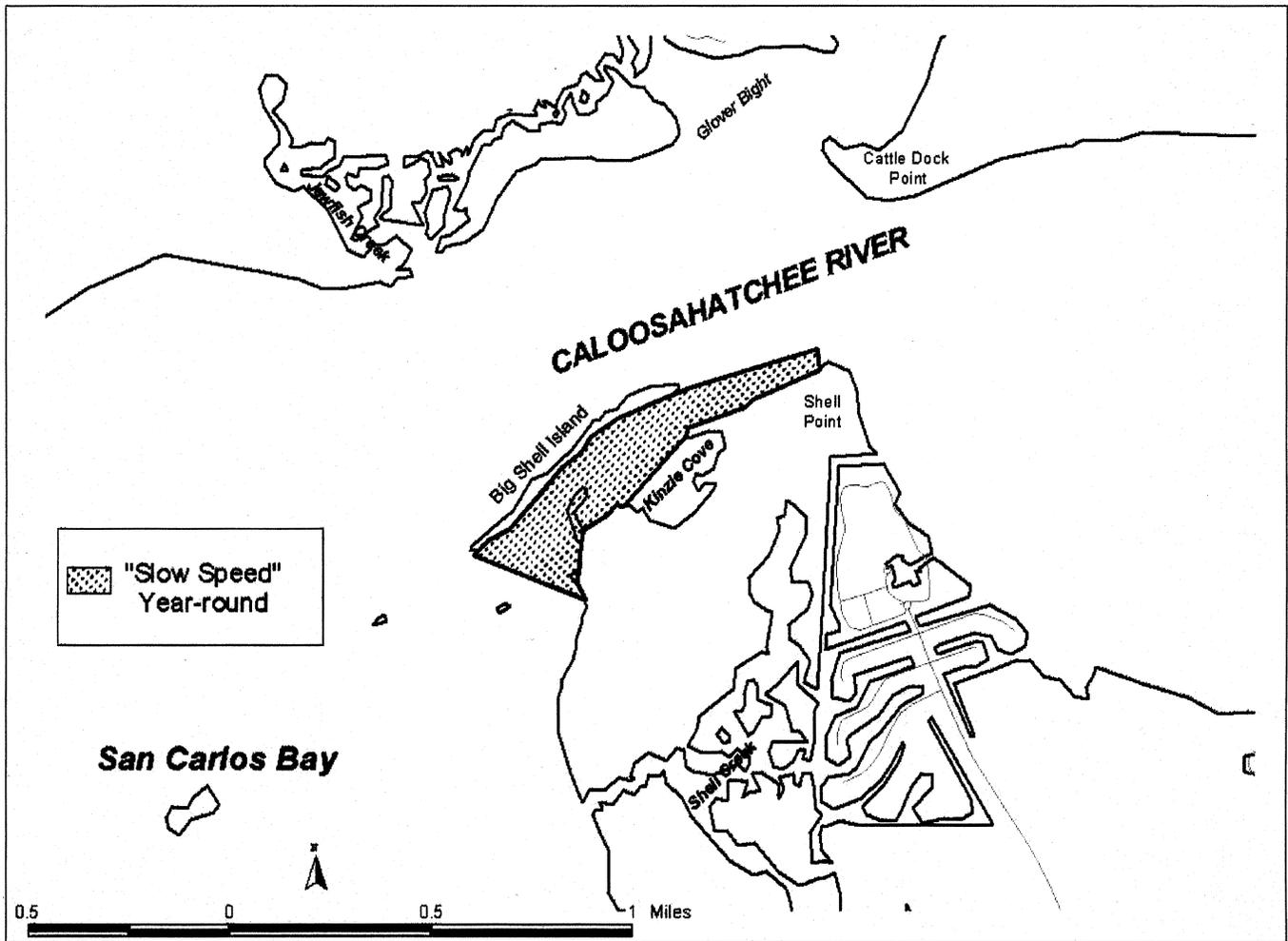
Peace River Manatee Refuge

(9) The Shell Island Manatee Refuge.
 (i) The Shell Island Manatee Refuge is described as all waters within the marked Intracoastal Waterway channel between Green Marker "99" (approximate latitude 26 degrees 31'00" N, approximate longitude 82 degrees 00'52" W) and Green Marker "93"

(approximate latitude 26 degrees 31'37" N, approximate longitude 81 degrees 59'46" W), Lee County, Florida; containing approximately 32.6 ha (80.5 acres).
 (ii) Watercraft are required to proceed at slow speed (channel included) year-round. Watercraft are prohibited from

traveling in excess of slow speed in this area, year-round.

(iii) Map of the Shell Island Manatee Refuge follows (see Shell Island Manatee Refuge):



Shell Island Manatee Refuge

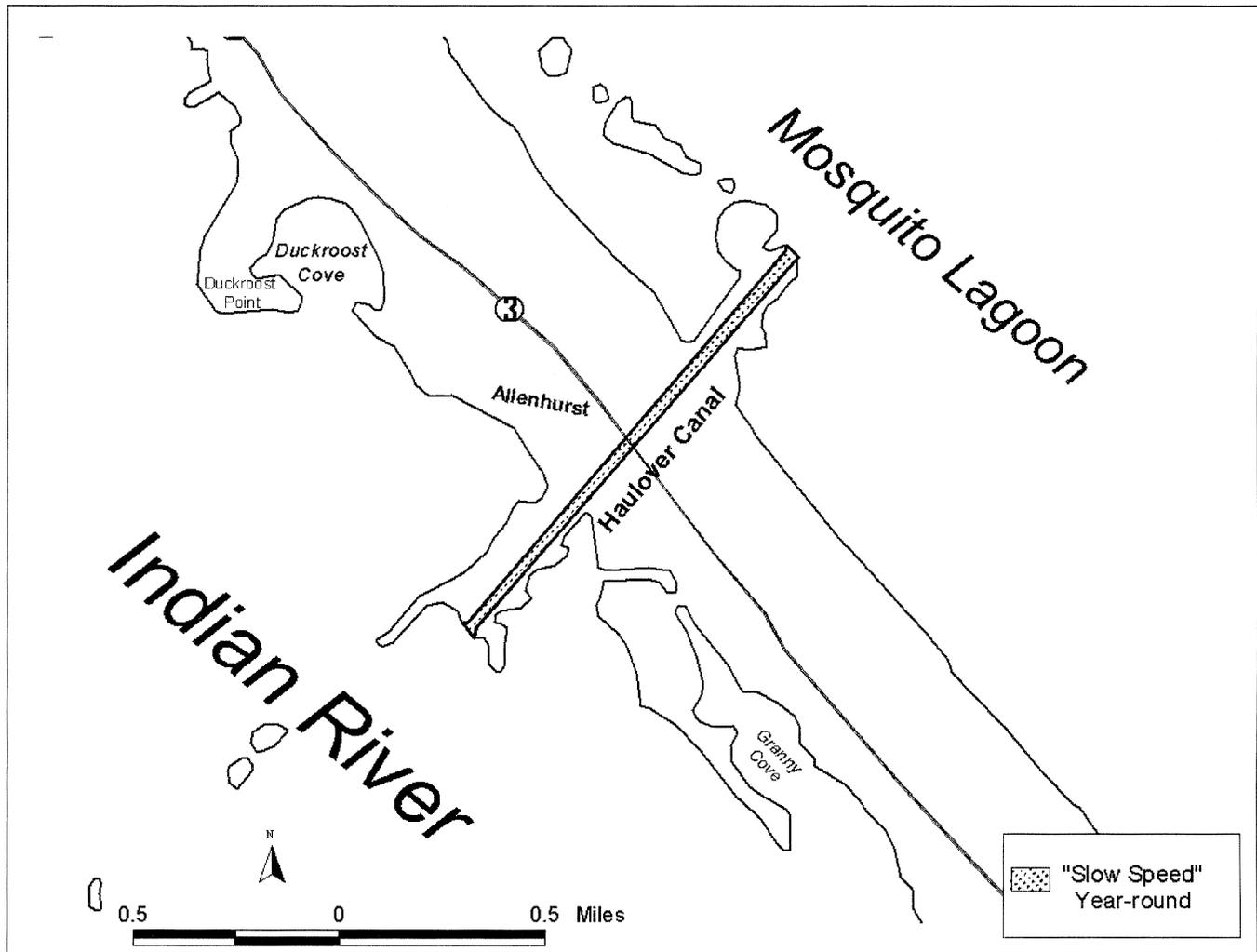
(10) *The Haulover Canal Manatee Refuge.* (i) The Haulover Canal Manatee Refuge is described as all waters lying within Haulover Canal in Brevard

County, Florida; containing approximately 8.95 ha (22.11 acres).

(ii) Watercraft are required to proceed at slow speed (channel included) year-round. Watercraft are prohibited from

traveling in excess of slow speed in this area, year-round.

(iii) Map of the Haulover Canal Manatee Refuge follows (see Haulover Canal Manatee Refuge):



Haulover Canal Manatee Refuge

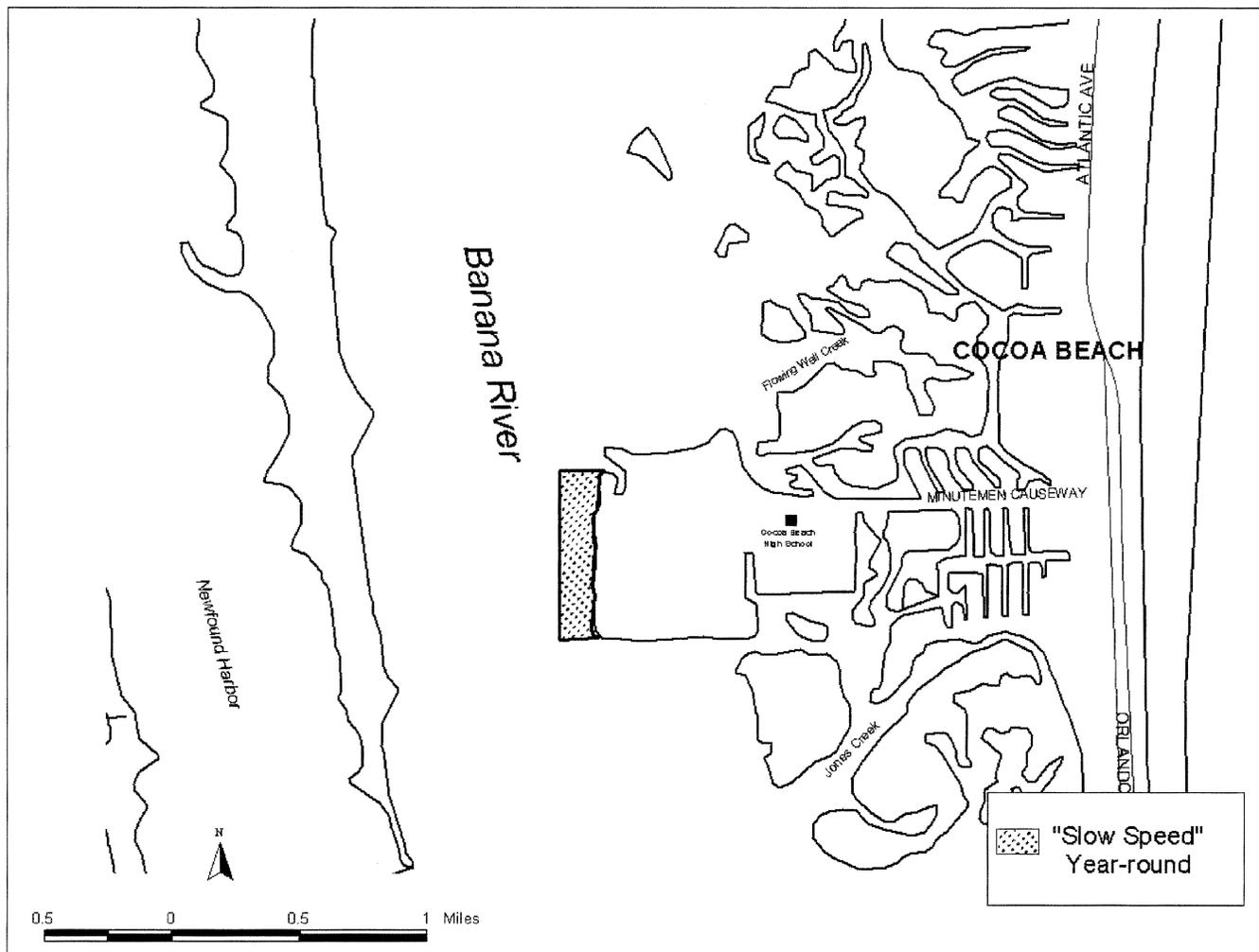
(11) *The Cocoa Beach Manatee Refuge.* (i) The Cocoa Beach Manatee Refuge is described as the waterbody west of Municipal Park within the City of Cocoa Beach, Florida, commencing at a point 45.7 meters (150 feet) west of the southwest corner of the canal running between Willow Green and Country Club Roads, thence southerly (and parallel to the golf course shoreline) to a point 45.7 meters (150 feet) west of the

southwest corner of the Municipal Golf Course shoreline, thence south to marker "502," thence westerly (inclusive of the area known as the "400 Channel") to Red marker "500," thence northerly to Red marker "309," inclusive of the "400 Channel," thence southeasterly to the southwest corner of the eastern half of Sections 8 and 17,

Township 25 South, Range 37 East; containing approximately 23.9 ha (59.1 acres).

(ii) Watercraft are required to proceed at slow speed (channel included) year-round. Watercraft are prohibited from traveling in excess of slow speed in this area, year-round.

(iii) Map of the Cocoa Beach Manatee Refuge follows (see Cocoa Beach Manatee Refuge):



Cocoa Beach Manatee Refuge

Dated: October 31, 2002.

Paul Hoffman,

*Acting Assistant Secretary for Fish and
Wildlife and Parks.*

[FR Doc. 02-28278 Filed 11-5-02; 9:57 am]

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