

*Attachment 2***Manatee Assessment Report  
February 28, 2002**

As a result of a meeting on January 8-9, 2002, among all parties in the *Save the Manatee v. Ballard, et al.* lawsuit, the Fish and Wildlife Service (Service) agreed to re-evaluate three points discussed in the meeting. These points include (1) the increased law enforcement effort by the State and the Service as well as local governments or other Federal agencies; (2) other regional areas of concern identified by the Save the Manatee Club that need to be assessed to determine if additional remedial actions are necessary to conserve manatees; and (3) reassess the manatee maps developed by the Service as part of the Interim Strategy that identified "areas with inadequate protection." Additionally, and in accordance with the Interim Strategy, the Service agreed to provide an assessment of the effectiveness of the Interim Strategy for the period of August 21, 2001, to December 31, 2001.

**Law enforcement effort**

The Service agreed to the actions listed below regarding law enforcement. After multiple requests and rigorous efforts by many individuals throughout the Florida Fish and Wildlife Conservation Commission's, Bureau of Protected Species (FWC); FWC's Division of Law Enforcement (DLE); and the Florida Department of Highway and Motor Vehicles, Bureau of Vessel Registration, as well as the Service's Law Enforcement personnel, we have determined the following regarding each of these actions:

1. The Service will work with the State to generate data that compares the level of law enforcement effort before and after the final interim guidance. This will include determining the average percent of an officer's time spent monitoring manatee zones.

DLE did provide the number of hours spent monitoring manatee speed zones from April 29, 2000, through January 31, 2002, for the following counties: Brevard, Broward, Citrus, Collier, Duval, Hillsborough, Indian River, Lee, Levy, Manatee, Miami-Dade, Palm Beach, Sarasota, and Volusia. However, DLE does not have a record of the total amount of time officers spend patrolling on the water. Without this information, we cannot determine the average percentage of an officer's time spent monitoring manatee zones while performing on-the-water patrols.

As a result of September 11, DLE officers have worked approximately 11,000 hours (including 3,000 hours of overtime) on homeland defense. Many of these officers were patrolling the waterways near power plants. Though these officers were not conducting manatee activities specifically, their presence in these locations certainly added additional protection to manatees and provided benefits to the manatees.

2. The Service will continue to revise the calculation regarding the law enforcement effort per county to determine the amount of additional law enforcement coverage for boat slips.

DLE provided information on law enforcement positions as of January 1, 2001, and January 1, 2002. While DLE did not have records on the allocation of law enforcement positions by county prior to January 1, 2001, they did have a total number of positions by year statewide from 1995 to 2002. The information illustrates that there was an increase in almost every county in the number of State law enforcement positions from January 2001 to January 2002 that conduct on-the-water law enforcement. The data used to generate the numbers in Table 1 only reflects the number of individuals that actually conduct on-the-water duty. Though the information from the State identified there were 21 vacancies statewide, we do not believe this has an impact on the overall law enforcement effort in the counties at this time.

Based on the increase in law enforcement positions (215 more) from January 1, 2001, to January 1, 2002, when compared to the number of registered vessels for 2000 and 2001, our analysis indicates that the ratio of vessels per officer decreases meaning the amount of officer time (in minutes) available for each vessel increases (Table 1). Statewide, the ratio of vessels to officers decreased 47 percent while the amount of officer's time to vessels increased 87 percent.

Additional law enforcement coverage continues to be provided by the Service's law enforcement personnel and Refuge officers as well as other Federal agencies like the Coast Guard. These agencies have been providing law enforcement coverage since 1997. Table 2 lists the number of speed zone violations cited by the Coast Guard for last year and early this year. For 2001, Service officers performed a series of task force events (12) throughout the State resulting in the issuance of more than 600 violations for noncompliance with manatee speed zones (Table 3). Eleven more task force events are scheduled between January and September for 2002 (Table 4).

3. The Service, with the help of the State and SMC, will complete an analysis of the ratio of officers to slips per county. At this time, however, the data may only be available for a few counties. The Service will conduct a preliminary review of this information to determine the applicability and if it is feasible.

In reassessing the Interim Strategy's foundation on sufficient levels of law enforcement by county, the Service considered analyzing the ratio between the number of law enforcement officers and the number of boat slips within a particular county as a more appropriate measure of increased law enforcement effort for watercraft access projects.

To that end, FWC provided copies of any draft and final Manatee Protection Plan. As a component of the plan, each county is required to conduct a boating facility siting survey. The data within these surveys is quite variable. Some counties conducted only marina surveys while other counties accounted for every docking slip within its boundaries. Also problematic is that the surveys themselves range

from outdated material to current information. Another problem with considering the number of slips by county is that only 13 of the 32 manatee counties are required to develop manatee protection plans. In conclusion, considering the number of slips by county in our analysis is not feasible at this time.

4. The Service and the State will continue to standardize their reporting requirements regarding the law enforcement efforts for manatee enforcement. The Service will also ensure that they received these reports and make adjustments as appropriate to the law enforcement analysis.

This activity is ongoing.

#### Law Enforcement Monitoring effort associated with the Interim Guidance

In determining the effectiveness of the State's law enforcement efforts as it relates to the Interim Strategy, watercraft-related manatee mortality data for 2001 was compared to mortality data for 2000. Also considered in the comparison was the increase in law enforcement personnel with the State as well as the number of new slips for watercraft access projects approved by the Service in 2001.

The following changes occurred from January 1, 2001, to January 1, 2002, for the 32 counties affected by the interim strategy: (1) manatee mortalities increased from 78 to 80, (2) law enforcement positions increased from 187 to 402, including 21 positions currently vacant, and (3) 3,625 new slips determined "not likely to adversely affect" the manatee by the Service. Lee County lead the way with 597 new slips, including 226 slips for single family docks, and was followed by Collier, Martin, Duval, and Monroe counties (Table 1).

In reviewing the manatee mortality data for 2001, there were alarming increases in manatee deaths for 2 of the 31 counties: Volusia County mortality increased from 4 to 10 (see discussions on Tomoka River and Halifax River). In Lee County, the mortality increased almost twofold from 13 to 23 manatee deaths. For the remaining 30 counties, we believe that the existing levels of law enforcement are consistent with the Interim Strategy.

As for Lee County, some background information is necessary. Manatee speed zones (seasonal) were established in the Caloosahatchee and Orange rivers around the Fort Myers power plant in 1979. Additional speed zones were established in the Caloosahatchee downstream from the power plant in November 1989. Speed zones were established countywide in November 1999. All zones were to be posted with the appropriate signage by July 2001.

According to DLE, there were ten officers assigned to Lee County as of January 1, 2001, with another three officers assigned on July 1, 2001, for a total of 13 officers. As a result of the terrorist attack on September 11, 2001, two of these officers were activated for military duty, thus reducing the number of sworn officers to 11. In addition to the State's officers, Lee County Sheriff's Office has 22 officers available for on-the-water patrol activities such as enforcing

manatee speed zones. State law enforcement officers issued 341 citations while the Sheriff's Office issued 2 citations during 2001 (Table 5).

### Interim Guidance and associated Manatee maps

#### **Lee County**

Despite the establishment of manatee speed zones, the signage associated with the zones, and increased law enforcement efforts provided by the State, watercraft-related manatee mortalities continued to increase in Lee County, particularly in the Caloosahatchee River region, from 10 to 13 to 23 for 1999, 2000, and 2001, respectively. Furthermore, five more manatees have died as a result of watercraft collisions in January 2002, totaling 28 deaths for the past 13 months. Lee County alone represents roughly 30 percent of the total watercraft-related mortalities statewide for the same time period (January 1, 2001 - January 31, 2002). Based on the continuing increase in watercraft-related manatee mortalities, the Caloosahatchee River will be designated as an area with inadequate protection (see map).

Another area in northern Lee County receiving this designation is Bokeelia at the north end of Pine Island. The designated area extends east, north, and west of Bokeelia. The area has averaged more than one manatee death per year for the past 5 years. With the exception of a small waterbody, known as Pelican Bay, near the north end of Cayo Costa Island, there are no designated manatee speed zones in the area. In the absence of such zones, we believe that take of manatees is likely to occur if new watercraft access projects are authorized in this area. For these two new designations of "areas with inadequate protection" as well as the already designated Ten Mile Creek/Mullock Creek area; we believe that take of manatees is likely to occur for all new watercraft access projects, including single family docks, authorized in these three areas.

Conversely, the Imperial River in southern Lee County was originally designated as an area with inadequate protection. However, based on the 2001 data, watercraft-related manatee mortality is not a problem in the Imperial River. We believe that the inadequate protection designation for the Imperial River should be removed due to the absence of manatee deaths coupled with the year-round slow speed zone posted throughout the river.

#### **Volusia County**

See discussions on the Tomoka River in the Site-by-Site Discussion. As a result of this new information, the Service will modify specific areas on the maps of Volusia County and expand the area with inadequate protection as indicated in this summary.

We believe there needs to be a change to the current designation in the northern portion of the Halifax River. As such, we have changed the map to identify this area as an area with inadequate protection. The area extends from the Tomoka Basin to the north to the Main Street Bridge to the south. The Plaintiffs stated that the designation should be extended southward to the Ponce

de Leon Inlet. We have reviewed this area and have determined that in light of high levels of watercraft-related mortality last year in Volusia County (10), it is prudent at this time to extend the area with inadequate protection designation south to the A1A (Dunlawton) Bridge. We do not agree that the area between the A1A bridge and the Inlet warrants this designation. Our primary concern with this area of inadequate protection is the existence of two watersports zones in waters that are frequented by manatees. We have expressed this concern to Volusia County, which has expressed an interest in evaluating the possibility of eliminating these watersports areas. There are currently five pending Corps permit applications in the portion of the river we now consider to be an area with inadequate protection. All five applicants have been informed of our concerns.

#### **Brevard County and Indian River County**

See discussions on the Sebastian River. We find no evidence that the existing regulatory scheme is inadequate.

#### **Collier County**

See discussions for Everglades National Park, Ten Thousand Islands, and Faka Union Canal/Port of the Islands. We will continue to work with NPS in the development of their manatee strategy. Ten Thousand Islands may need additional protection, but first there needs to be an assessment to determine what areas should be designated. We will continue to monitor the area. The applicant in the Port of the Islands has expressed a willingness to restrict access to address concerns in this area.

#### **Manatee Protection Areas and Other areas of concern**

The Fish and Wildlife Service selected sites for inclusion in the proposed rule for the establishment of additional manatee protection areas from the list of sites developed through five preliminary meetings with State and Federal resource managers and manatee experts, and the information gathered from the public at six public workshops and in response to the advance notice of proposed rule-making. 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 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.

In documenting manatee use and historic manatee harm and harassment, we relied on the best available data including aerial survey data and manatee mortality data, information from the Florida Marine Research Institute, Pathobiology Laboratory, and other information from State and Federal sources. These data were supplemented with information from manatee experts, the public, and our best professional judgment. In determining the potential effectiveness of our proposed actions, we considered the costs of managing sites versus the benefits to manatee

conservation. Costs associated with site management include installation and maintenance of appropriate signage, public education, and enforcement. In addition, designation of sanctuaries in the waters bordered by private property would entail additional administrative burdens in terms of identifying and providing access to affected residents. We considered these administrative burdens in selecting sites. Finally, we evaluated the effectiveness of our proposed actions against the likely effectiveness of actions by State and/or local governments. We have not proposed areas for which we have determined that identified threats to manatees can be most effectively addressed by State or local action. We made every effort to make our proposed designations consistent with the adjacent State or local designations.

### Site-by-Site Discussion

The following is a discussion of each of the sites recommended by the Plaintiffs, many of which were discussed at the July 23, 2001, meeting between representatives of the Plaintiffs and the Service. These are the same sites that were discussed among the Plaintiffs, Interveners, Service and FWC at the January 8-9, 2002, meeting. Table 6 provides summary information regarding each of these sites.

#### Mulberry Cove

This site is located on the St. Johns River in Duval County (Figure 1 and 1a). The site is adjacent to Naval Air Station - Jacksonville, and is currently protected by a slow speed designation that extends 500 feet from the shoreline. As such, the majority of this small cove is currently protected by a manatee slow speed zone. There is currently a small marina in the cove. Manatees do use this area, although it is not an aggregation area. There has been limited manatee mortality in this area historically. The benefit of designating the cove as a sanctuary would be to ensure that this section of the St. Johns River (near Jacksonville) has at least one place with very limited boat traffic, to provide a reliable spot for manatees to shelter. The Plaintiffs stated at the July 23, 2001, meeting that they believe there is an urgent need for a sanctuary in this portion of the St. Johns River (between the Fuller Warren Bridge and the Buckman Bridge). This portion of the river currently receives relatively light boat traffic, so we do not necessarily agree with this assessment. The Mulberry Cove area in particular currently receives limited human use, so the immediate benefit of a sanctuary designation would be limited.

This cove has been evaluated for possible designation as a sanctuary before by the County, State and Navy. As the area currently receives limited public use, a sanctuary designation would probably be relatively non-controversial. It is possible that the cove has not been designated to date, because it is not a priority and has not been deemed as an urgent action. At this time, regulatory agencies have focused on higher priority sites. Additionally, the cove is currently off limits to the public due to heightened security around the naval air station. The simplest means of enacting long-term protection of the site would be for the Navy to establish a permanent security zone around the cove within their jurisdiction.

The Plaintiffs had recommended this site as a sanctuary in their October 2000 comments on our advance notice of proposed rulemaking. Mulberry Cove was not included in their recommended list of sites discussed at the July 23, 2001, meeting. We suggested the site as an alternative to their suggestion that Goodbys Creek be designated a manatee sanctuary (see below).

This sanctuary designation would only provide a small benefit to manatees, and could probably be accomplished with limited controversy through County or Navy measures. We will continue to work with the entities to provide alternative means of protection. The County and State are not currently considering action on this site. It would be a far better sanctuary than Goodbys Creek, but the site is a much lower priority than any of the sites included in our proposed rule. The Navy has agreed to initiate actions within their scope and authority for the protection of manatees in this area. We intend to convene a meeting of the County, State, Navy and us to further discuss options for this site.

#### Goodbys Creek

Goodbys Creek is a minor tributary to the St. Johns River in Duval County (Figure 1 and 1a). The creek is navigable, and there are currently many residences with docks and existing marinas along the creek. It receives some use by manatees, but is not an aggregation site. The entire creek is currently designated as a slow speed zone, and the County will soon be changing the designation to idle speed. There has been limited mortality of manatees in the creek and vicinity, and the idle speed designation will effectively minimize the risks of future take.

We have told the Plaintiffs that the site is a poor candidate for sanctuary designation due to the large number of residential docks along the creek. Virtually all boat traffic in the creek is residential, and because our sanctuary designations allow access for residents, a sanctuary designation would have little or no effect on boat traffic in the creek. At the July 23, 2001, meeting the Plaintiffs agreed that Mulberry Cove was a preferable site for a sanctuary. Inexplicably, they continued to recommend Goodbys Creek (and not Mulberry Cove) as a sanctuary in their October 2001 comments in response to our proposed rule.

#### Downtown Jacksonville

This site includes the St. Johns River between Reddie Point and the Fuller Warren Bridge (Figure 2 and 2a). The area is used as a travel corridor for boats and manatees, and because it is a relatively narrow waterbody, it has seen significant mortality. Historically, the area supported two warm water discharges that served as congregation areas for manatees, which most likely contributed to the high level of watercraft-related take in this area. These discharges no longer exist, so manatee use of the area is now largely restricted to the warm season.

Manatee protection measures in this area currently consist of shoreline slow speed buffers ranging between 300 and 600 feet in width. Prior to 2001, the area was designated as slow speed, with a 25 mph speed limit in the marked channel. We opposed the change in designation, stating that the new zones did not provide sufficient manatee protection; particularly given the limited amount of signage used to delineate the new zones. Given the relatively narrow width of the zones, it is our view that they must be very clearly marked in order to ensure that high speed boat traffic does not encroach upon the nearshore waters where manatees are most likely to occur. Due to the narrow width of the zones and the poor signage, we had already designated this stretch of the river as an area with inadequate protection; consequently, there will be no changes to the maps.

The Plaintiffs requested that the area be returned to the "slow speed, 25 mph channel" designation. We have stated that adequate protection in this area could be achieved through returning to the previous designation or improving the signage of the existing zones. Recently, two developers seeking to build marinas in this area have agreed to fund installation of additional signs that would meet our standards and resolve our concerns regarding the adequacy of these speed zones. With improved signage, and with the above-mentioned reduction in manatee use resulting from the elimination of the warm water discharges, we could consider this stretch of the river to be an area with adequate protection. However, until these actions have taken place the area will remain an area of inadequate protection.

#### Tomoka River

The Tomoka River is a narrow, winding, navigable waterway located in northern Volusia County (Figure 3 and 3a). The river currently has a variety of speed zones ranging from idle speed to 25 mph. The area is used by manatees, with highest use occurring during warm weather. There are no manatee aggregation areas on the river, although evidence indicates that the river is used as a calving area. Take has historically been limited, although in 2001 there were three watercraft-related mortalities on the river. County officials have told us that there may be a new waterskiing club using the river, which if true could explain the recent increase in manatee mortality.

The Plaintiffs have suggested that the entire river be designated as a slow speed zone. The State is not currently considering action at this site. At the time of the analysis for our proposed rule, the site was not considered to be a high priority. We believe we need to monitor the area to determine if elevated levels of take continue to occur, in order to properly assess if regulatory action needs to be taken. We had already identified the site as an area with inadequate protection, so there will be no changes to the map in this area.

#### Haulover Canal Observation Area

The Haulover Canal is a narrow, man-made waterway connecting the Mosquito Lagoon and Indian River Lagoon in Brevard County (Figure 4a, 4b, and 4c). The area is heavily used as a travel corridor for manatees and boats. The canal itself is currently regulated as a slow speed

zone, but the waters surrounding the canal are largely unregulated. As such, there has been a significant amount of take in this area. To address this concern, we have proposed establishing slow speed zones within 0.5 miles of each end of the canal. The State has also expanded the slow speed zones around the canal as part of their recent rulemaking for Brevard County.

In addition to serving as a travel corridor for manatees, there is a small area within the canal that seems to attract small numbers of manatees. The Merritt Island National Wildlife Refuge has established an observation platform at this location. The Plaintiffs believe that a sanctuary should be established at this site. This small aggregation area meets our basic criteria for a sanctuary, and the NWR supports such a designation. Any sanctuary would need to be very small in order to not impede navigation through the canal which is part of the Atlantic Intra-coastal Waterway (AIW). The benefits of such a sanctuary would be small, and the site has not been considered a high priority. It is certainly a lower priority than any of the 16 sites identified in our proposed rule. A sanctuary designation would most likely be non-controversial. The State and County are not considering any action at this site.

#### Barge Canal/Sykes Creek

We believe that all of the Plaintiffs concerns regarding these sites were addressed through our final rule designating the sites as slow speed zones. They are included here to ensure completeness in discussing all the sites included in their list. The only additional comment to be made at this time is that they have expressed concern about our intention of proposing to allow exceptions to the slow speed designation in the Barge Canal. As they have not yet seen our proposed rule, they have no specific concerns at this point.

#### Canaveral Sewer

This site is located on the Banana River in Brevard County, Florida (Figure 5, 5a, and 5b). This area is heavily used by manatees throughout the year. The fresh water from the sewer outfall serves as an attractant for manatees. There has been a limited amount of take in this area historically. The Plaintiffs have requested that the area be designated as a sanctuary. Prior to 2001, the area was designated as a slow speed zone by the State. In 2001, the State changed the designation of the area to idle speed, which should add an additional measure of protection.

Given the limited extent of historic mortality in this area and the reduced likelihood of future mortality with the State's recent idle speed designation, the site does not meet our basic criteria for designation as a federal manatee protection area. We agree with the State's action at this site, and do not feel additional action is warranted.

#### Sebastian River

The Sebastian River is a tributary to the Indian River Lagoon located on the Brevard County/Indian River County line (Figure 6 and 6b). Fresh water discharging from the C-54 canal

acts as a manatee attractant, and the area receives substantial use by manatees. There has been very limited take of manatees at this site in recent years. The majority of the river is a slow speed zone, and the area near the canal discharge is motorboat prohibited. The Plaintiffs claim that enforcement at this site is inadequate.

Given the near absence of mortalities at this site, we find no evidence to support a determination that the existing regulatory scheme, including enforcement, is inadequate. Devoting additional enforcement resources to this area would draw resources away from areas where mortality is occurring, which would be counter-productive. The State is not considering further action at this site.

#### Indian River Southeast of the Railroad Bridge

This site is located on the Indian River Lagoon, north of Titusville, in Brevard County, Florida (Figures 7, 7a, and 7b). The area is used by manatees, although there are no manatee attractants at the site. Until 2001, the site was designated as a slow speed zone by the State. As such, there has been no manatee mortality at this site. The waters north of the railroad bridge were not regulated by the State. In their recent rule-making for Brevard County, the State designated the waters north of the railroad bridge as slow speed zones, but removed the slow speed designation from the area southeast of the bridge, as a concession to watersports enthusiasts that use the area. The area to the southwest of the bridge has remained a slow speed zone throughout.

The Plaintiffs are concerned that the elimination of the slow speed zone southeast of the bridge will result in take of manatees that have become accustomed to the area being a slow speed zone. They suggested that the entire area around the bridge be designated as a slow speed zone. Given the lack of historic mortality, this site does not meet our criteria for designation as a manatee protection area. We will monitor the change in the designation to determine if removing the slow speed designation from this site has created additional mortality. It may turn out the manatees simply adjust their use patterns to the new slow speed zones north of the bridge, and/or to the slow speed zone southwest of the bridge. We do not believe we should impose additional Federal designation until the effects of the State's actions can be evaluated.

#### Riviera Beach Power Plant

This site is a warm water discharge site in Palm Beach County (Figures 8 and 8a). The area receives extensive use by manatees during winter months. The area in the immediate vicinity of the discharge is designated by the State as a motorboat prohibited area during winter months, and a limited amount of take has occurred at this site in the past. The problem with this site is that the warm water plume from the power plant extends beyond the motorboat prohibited area into the AIW, which is immediately adjacent to the motorboat prohibited area. As such, manatees

seeking warm water are loitering in the AIW which is heavily used by boats. Boat speeds in the AIW are currently not regulated.

As this warm water site becomes more popular with manatees, the potential exists for take to occur due to the close proximity of the warm water discharge to a high-speed boat corridor. The Plaintiffs requested that the AIW in the vicinity of the power plant be designated as an idle speed zone. This appears to be prudent; however, given the limited amount of mortality to date, we did not consider this site to be a high priority at the time we were preparing our proposed rule. We believe this is an area that needs to be monitored. To our knowledge, neither the State nor the County is considering action at this time.

#### Manatee River/Braden River

The Manatee River is located in Manatee County, Florida, and the Braden River is its major tributary (Figure 9). The area receives a fair amount of use by manatees. There are currently no manatee protection zones in Manatee County. Take has historically been fairly low, although over the last five years there has been an average of 1.2 manatees killed by watercraft per year in the county. Our concern is that the area around the Manatee and Braden rivers is developing rapidly as the Tampa/St. Petersburg area continues to expand. There are many pending permit applications for housing developments with associated docks and marinas along these rivers. Given the fact that some take has occurred, and more is expected with increased human use, we had already designated all of Manatee County as an area with inadequate protection. Therefore, there will not be any changes to the map in this area.

The Plaintiffs have suggested that the Manatee and Braden Rivers be designated as slow speed zones with a 25 mph speed limit in the marked channel. The State is not considering action in this area. Many of the developers that are currently seeking Corps authorization to build boat access facilities on the rivers are approaching the County about establishing speed zones, in response to our expressed concerns regarding the potential effects of their projects on manatees. To date, there is no indication that the County is interested in taking action, but this may change as pressure from the development community mounts.

Despite our concerns regarding the lack of speed zones in Manatee County, take in this area has not been as high as at the sites identified in our proposed rule, therefore, we did not consider it to be as high a priority. Additionally, this is a fairly large and complicated waterbody. As such, it would require substantial resources for us to effectively designate, post, and enforce the site. Given that we had already identified the Peace River and Lemon Bay as priority sites for Federal designation, which are also large and complicated sites with substantially higher rates of take, we decided that it was beyond our current capabilities to also take effective action at this site. As such, in light of the other actions included in our proposed rule, we determined that this site did not meet our fourth criterion for designation, in that we could not effectively manage a manatee protection area at this site in addition to our other responsibilities. The site will remain an area

with inadequate protection. We do, however, believe we need to continue to monitor the site to determine if it warrants additional action in the future.

#### Bokeelia Point

This site is located on the north end of Pine Island in Lee County (Figure 10). The site is frequented by manatees; although there are no aggregation areas in the vicinity. There are no speed zones in the vicinity and some take has occurred over the years. We are concerned about the increase in watercraft-related mortality in Lee County, particularly last year, and we believe this site needs to be identified as an area with inadequate protection and have changed the map accordingly.

The Plaintiffs requested that the area be designated as a slow speed zone. The State is not proposing specific action at this site, but it will be part of their overall evaluation of the speed zones in Lee County, which is to be completed by the fall of 2003. The site does meet our basic criteria for designation as a Federal manatee protection area, but is not considered to be a greater priority than the sites identified in our proposed rule. We will monitor the area to assess if elevated levels of mortality occur and determine if regulatory actions are necessary.

#### Caloosahatchee River

The Caloosahatchee River is located in Lee County (Figures 11, 11a, and 11b). It receives extensive use by manatees throughout the year, and is heavily utilized by boats. Watercraft-related manatee mortality has been a persistent problem on the river for many years. The State has established slow speed shoreline buffer zones, within 0.25 miles of each bank of the river, from the mouth upstream to the Edison Bridge. Upstream of the bridge is a major warm water aggregation site at the Fort Myers Power Plant, and the river has a variety of speed zones including slow speed bank-to-bank with a 25 mph speed limit in marked channel; idle speed bank-to-bank including the channel during winter months; and motorboat prohibited during winter months.

These speed zones appear to adequately cover the areas of the river most heavily used by manatees. The State has taken steps in recent years to improve signage of the speed zones; the State as well as the Service have allocated considerable resources to law enforcement in this area, and our agents report good levels of boater compliance in the area. Despite these actions, unacceptably high levels of take continue to occur. After the record high levels of watercraft-related mortality observed in Lee County in 2001, the FWC had a meeting with State biologists, researchers, enforcement officers, and management to attempt to identify the cause(s) of the problem and potential solutions. None were identified. The State is evaluating the situation and should present findings by the fall of 2002.

The Plaintiffs suggested that the entire river be designated as slow speed with a 25 mph speed limit in the channel. Given that all available information indicates that the existing speed zones

should be sufficiently protective (i.e., evidence indicates that most manatee use occurs within 0.25 miles of the shoreline), there is no indication that restricting high speed boat travel to the marked channel will be any more effective than the current regulations. Additionally, while the river easily satisfies our first three criteria for designation, it is a very large waterbody that would be extraordinarily difficult for us to manage. Designation of this site would all but preclude action at other sites. Any additional regulatory action in Lee County would be exceedingly controversial.

We will continue to focus law enforcement in this area and should encourage the State and County to do the same. However, based on the continuing increase in watercraft-related manatee mortalities, we believe the map for the Caloosahatchee River/San Carlos Bay area will need to be designated as an area with inadequate protection (see map).

#### Ten-mile Canal/Mullock Creek

Mullock Creek is a tributary to Estero Bay in Lee County (Figure 12). Ten-mile Canal drains into Mullock Creek. Mullock Creek receives some use by manatees. There are two borrow pits on the canal which act as a warm water aggregation area for manatees during winter months, and appear to receive some year-round use. Both waterbodies also receive a fair amount of boat traffic. There has been some watercraft-related mortality on these waterbodies over the years. The canal and creek are currently regulated as slow speed zones; however, in response to complaints by residents, the State recently changed the designation on Mullock Creek such that high speed boat travel is permitted during low tide so that boats may proceed on plane over the many shallow areas of the creek. This designation has not yet been implemented.

The Plaintiffs stated that the designation of Mullock Creek should be changed back to slow speed. They also want the borrow pits to be designated as sanctuaries. The State is evaluating watercraft-manatee interactions on Mullock Creek and should have findings prepared by fall of 2002. In the mean time, they have asked that the new designation for Mullock Creek be given a chance to work. They are not considering action on the Ten-mile Canal.

While there has been some historical mortality of manatees at these sites over the years, it has not been as significant as at other sites, including those identified in our proposed rule. We did not support the tidally influenced speed zone designation for Mullock Creek, but we do not believe we have the justification to take action to overturn the designation. Similar to the case with the railroad bridge in Brevard County, we do not intend to take action to essentially overrule a State action until we have evidence that the State action was in fact detrimental to manatees. These types of actions will be monitored. We had already designated Mullock Creek as an area with inadequate protection due to our concerns about the speed zone. As for the Ten-mile Canal, this site is not as significant an aggregation area as the warm water sites identified in our proposed rule, and the threat of mortality is not as great. Therefore, this is not a priority action at this time.

#### Southern San Carlos Bay

San Carlos Bay is located at the mouth of the Caloosahatchee River in Lee County (Figures 13 and 13a). The area receives considerable use by manatees throughout the year and is also heavily used by boats. The northern portion of the bay is regulated as slow speed with a 25 mph speed limit in the marked channels. The southern portion of the bay is not regulated. There were six watercraft-related manatee mortalities in San Carlos Bay between 1996 and 2000, with five of those carcasses being recovered in the southern portion of the bay.

The Plaintiffs suggested that the southern portion of San Carlos Bay also be designated as a slow speed zone with a 25 mph speed limit in the channels. The FWC is evaluating the adequacy of the speed zones in this area as part of the broader evaluation of Lee County and should present findings in the fall of 2003. We have not done an in-depth analysis of boat travel patterns in this area, and we do not know how complicated a rule-making might be. We believe this site does satisfy some of our criteria for designation as a Federal manatee protection area, and the Plaintiffs recommendations appear reasonable. This action is not a priority at this time, but we will monitor the area. Given the level of controversy with any rule-making in Lee County, the rule-making process itself would require substantial resources and would be a lengthy process unquestionably involving judicial review.

#### Everglades National Park

Everglades National Park is located in Collier and Monroe Counties (Figure 14). The area receives extensive use by manatees and, though the area is fairly remote, there is a fair amount of boat traffic, particularly near Everglades City. As such, watercraft-related mortality is concentrated in the area in and around Chokoloskee Bay, near the Collier County/Monroe County line. There have been numerous watercraft-related mortalities in this area over the years. The waters within the Park are currently unregulated.

The Plaintiffs stated that a 25 mph speed limit should be imposed for all waters within the Park. It is our view that speed zones are needed within the Park, and we have asked the NPS to develop effective speed zones for Park waters. We believe that the 25 mph speed limit suggested by the Plaintiffs would be ineffective at reducing watercraft-related mortality, as demonstrated by the failure of the 25 mph speed zones in the Barge Canal.

The NPS has expressed a desire to take action and have stated their intent to develop manatee protection measures as part of their General Management Plan for the Park, which is currently under development. They also understand that they will need an effective manatee protection plan for the Park in order to ensure that their activities are in compliance with the Marine Mammal Protection Act. The Everglades National Park is a very large and complicated waterbody, and the NPS has stated that they need our expertise and assistance in developing an effective manatee protection strategy. We have offered our assistance and are ready to work with the NPS on this issue.

#### Ten Thousand Islands

The Ten Thousand Islands area includes the Chokoloskee Bay area mentioned above and the other waters of southern Collier County (Figures 14 and 14a). Manatee use and boating patterns are as described above for the Everglades National Park. Aside from the above-mentioned concentration of manatee mortalities in and around Chokoloskee Bay, there is also a history of watercraft-related mortality in the Faka Union Canal and Faka Union Bay. Most of the waters outside the Park Boundaries are currently regulated as 30 mph inside marked channels and 20 mph outside marked channels, which we believe may be ineffective in terms of manatee protection. The Faka Union Canal and the northern part of Faka Union Bay are slow speed zones, which appears to have addressed the historic watercraft-related mortality problem in this area. The Port of the Islands area at the head of Faka Union Canal is an idle speed zone. This area is discussed further below.

The Plaintiffs have requested that action be taken immediately to address watercraft-related mortality in the Ten Thousand Islands area, although they have made no specific recommendations. We agree that the existing speed zones are inadequate in some areas and some areas are designated as such. We had already identified the Chokoloskee Bay area as an area with inadequate protection and there were no changes to the maps. The FWC is evaluating the Ten Thousand Islands area and should present findings in the fall of 2004. As with the Everglades National Park, this is a vast and complicated waterbody. To our knowledge, no one has developed a good strategy for effectively designating manatee protection measures in this area. The FWC evaluation will hopefully serve as a basis for developing an effective plan. Additionally, given the size and complexity of the waterbody, it would be an extremely difficult area for us to regulate, even considering that there is a National Wildlife Refuge in the area, which could provide a base for operations. A final consideration in this area is the level of controversy that will arise with regulatory action based on feedback from the local boating community. We believe that even the most modest rule-making proposal will be vigorously protested by the local community and that it could take years to establish any type of designation.

#### Faka Union Canal/Port of the Islands

The Faka Union Canal drains into Faka Union Bay in the Ten Thousand Islands area of Collier County (Figures 14 and 14a). The Port of the Islands is at the head of the Canal. The area is heavily used by manatees and the Port of the Islands generates considerable boat traffic. As such, there has been a long history of watercraft-related manatee mortality in the canal and surrounding waters of the Ten Thousand Islands. Faka Union Canal and the northern portion of Faka Union Bay are slow speed zones, which appears to have addressed the historic watercraft-related mortality problem in this area.

Manatees are attracted to the fresh water that empties into some of the fingers of the Port of the Islands. These areas may also be slightly deeper and warmer than surrounding waters, which also helps to attract manatees. The Port of the Islands is currently an idle speed zone, and there is currently limited take in this specific area, and the current speed zones appear to be effective.

The Plaintiffs suggested that one or two small sanctuaries be established where manatees congregate in the Port of the Islands. This action does not appear warranted given the low level of mortality. Additionally, all boat traffic in this area is generated by local residents. The Port of the Islands is a point of origin for boat trips, not a destination. We have explained to the Plaintiffs that because our regulations allow access for residents, a sanctuary designation by the Federal government would have no effect on boat traffic patterns.

Additionally, we are working with an applicant for a Corps permit that has expressed a willingness to restrict access to one area to only a few boats, which may address the Plaintiffs concerns and provide benefits to the manatee. In a letter dated January 4, 2002, the applicant agreed to modify the Port of the Islands project by (1) constructing the Port of the Islands facility in phases; (2) replacing the 40 boat slips destroyed by Hurricane Andrew in phase 1; and (3) conducting a one year manatee speed zone compliance study of the Faka Union Canal area after completing phase 1. If the results of the survey reveal no statistically significant increase in manatee deaths in the Faka Union Canal, the Service will provide a letter to the Corps stating that the construction of the additional 37 slips, as described in the Public Notice, is consistent with the project description and the potential effects to manatees were considered. If authorized, this project could add a total of 77 watercraft to the Faka Union Canal.

The applicant has agreed to install two "Keep Out" buoys at the mouth of the northernmost section of the Faka Union Canal system to restrict vessel use in this manatee aggregation area. These buoys will be installed prior to commencing phase 1 of the project. The 12 replacement slips associated Dock H will be within this "Keep Out" area. These slips are intended for larger, motor-yacht vessels, and will require hotel check-in approval prior to their use and will be the only watercraft permitted within this area.

#### Permit Issues

##### Pineda Boat Ramp

We had written a concurrence letter on this project, based on our determination that proposed improvements to this existing facility would not increase boat traffic. The ramp, which is being structural improved is located in Brevard County in a location we had already determined to be an area with inadequate protection. The current situation is that the formal parking is limited so people park their trailers along the road. The County proposes to establish a parking lot and eliminate roadside parking as a matter of public safety. We asked the County to demonstrate that the current number of vehicles parking on the road is greater than or equal to the number of parking spaces that would be provided. They conducted surveys and presented data demonstrating that such was the case; therefore, the improvements would not increase boat access.

The Plaintiffs claimed that the County only conducted their survey during one holiday weekend, so the survey does not reflect typical conditions. The Plaintiffs claims are false. Surveys were

conducted during holiday and non-holiday weekends, and are perfectly valid. We stand by our determination.