Mr. Andrew Gude, Refuge Manager
Lower Suwannee and Cedar Keys National Wildlife Refuge
U.S. Fish and Wildlife Service
16450 NW 31st Place
Chiefland, Florida 32526

Dear Mr. Gude:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors, has reviewed U.S. Fish and Wildlife Service’s (FWS) November 2015 revised draft environmental assessment (EA) examining options to protect Florida manatees using the Three Sisters Springs Unit of the Crystal River National Wildlife Refuge while affording safe public viewing of animals. The Commission offers the following comments and recommendations.

Background

In August 2015, FWS requested comments on a draft EA examining two management options (other than the status quo) for improving protection of Florida manatees at Three Sisters Springs (the Springs), which is managed as part of the Crystal River National Wildlife Refuge. The two options included (1) prohibiting in-water public use of the Springs basin and discharge run during the winter manatee season thereby limiting public manatee viewing to a surrounding boardwalk (Alternative B) and (2) providing for public viewing from the surrounding boardwalk plus limited in-water Springs use for up to 29 people at any one time during the winter manatee season, with in-water visitors selected through a FWS-operated lottery system (Alternative C). The Commission provided comments on the August 2015 draft EA and the proposed management options in its 4 September 2015 letter (see enclosure). Based on all comments received on its draft EA, FWS revised the EA to consider a third management option. The new option (Alternative D) is similar to Alternative C, but with a more restrictive winter in-water visitor access program, allowing no more than 13 people in the Springs at any one time with a lottery system to select in-water visitors operated by the City of Crystal River instead of FWS. FWS is requesting comments on its revised draft EA with that additional option.

As noted in the Commission’s 4 September 2015 letter and in both the draft and revised draft EAs, manatee and human use of the Springs basin has increased from a maximum one-day count of fewer than 20 manatees to more than 550 manatees in recent years. At the same time, human use of the Springs has increased from virtually zero to over 1,000 people on some winter days. This has resulted in a significant increase in the frequency with which thermoregulating and nursing manatees have been disturbed by in-water Springs visitors. With no current limits on human access to the Springs, the frequency of human disturbance is likely to increase further. Recognizing the limited availability of natural warm-water refuges for manatees, the essential role of such refuges
for Florida manatee survival during winter, and FWS obligations to promote recovery of Florida manatees under both the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA), the Commission recommended that FWS adopt Alternative B restricting public visitors to the Springs to land-based viewing from the surrounding boardwalk during the winter manatee season. The Commission also recognized the public expectations and the commitments made by FWS with regard to accommodating in-water manatee viewing compatible with manatee protection at the time the Springs were purchased in 2010. The Commission therefore recommended that if FWS selected Alternative C allowing in-water access, then it should modify that alternative to further restrict in-water use by reducing the number of people allowed in the Springs basin at any one time.

**Alternative actions**

The revised draft EA retains essentially the same options described in the draft EA, but includes a new management option regarding winter in-water human access. The new Alternative D would reduce by more than half (from Alternative C) the number of in-water visitors allowed at any one time during the winter manatee season. That reduction provides greater assurance that fewer manatees would be disturbed during the winter manatee season than under status quo or Alternative C. The new Alternative also would transfer certain obligations for operating the in-water visitor access program to the City of Crystal River, with FWS retaining the authority for ensuring that the in-water visitor program is safe for manatees. In addition, Alternative D provides new cost-sharing arrangements between the city and FWS for constructing and maintaining visitor access facilities, which would reduce costs to FWS. Other provisions described in the draft EA applicable to Alternatives B and C in turn would apply to Alternative D (e.g., continuing monitoring activities of manatee and human use in the Springs and FWS discretion to close the Springs to all human in-water use at any time based on monitoring results and weather-related predictions of manatee use). The Commission believes that Alternative D will increase protection for manatees and is preferable to Alternative C.

Nevertheless, as discussed in its previous letter, the Commission continues to believe that any in-water human access during the winter manatee season is likely to limit manatee use of this essential habitat and result in disturbance that will cause some animals to leave the refuge. Continued winter in-water viewing opportunities in Kings Bay outside of the Springs are more than adequate to meet public in-water viewing needs. The Commission therefore continues to believe the best management option for protecting manatees in the Springs and providing the greatest assurance of manatee protection consistent with MMPA and ESA requirements, while providing public in-water viewing opportunities, is to limit public manatee viewing in the Springs to boardwalk visitors only. The Commission therefore continues to recommend that FWS select Alternative B limiting public manatee viewing in the Springs to boardwalk visitors during the winter manatee season. If FWS concludes that it is obligated to implement a management alternative providing for in-water visitor access for manatee viewing during winter, the Commission recommends that, on an interim basis, FWS select Alternative D restricting in-water winter use for visitors and accompanying guides to no more than 13 people at any one time and transferring responsibility for day-to-day management of the in-water viewing program to the City of Crystal River. In this regard, the Commission recommends that FWS authorize the new in-water program for no more than three years with provisions to (1) review monitoring results of manatee and human use of the Springs annually to determine whether the in-water visitor program should be continued or revised during the next manatee season and (2) decide at the end of the three years whether to terminate all in-water public
access during the winter manatee season or continue the program subject to further modifications. Finally, the Commission recommends that, regardless of what management option is selected, FWS implement it at the earliest possible date during the current winter manatee season.

Specific comments on the revised draft EA

Page 31, last bullet: The last bullet describes the lottery system for selecting in-water visitors. To allow family groups to participate in the in-water access program together, the Commission believes it would be appropriate to specify that an “applicant” under the lottery system could request access for a party of up to four individuals.

Page 32, first bullet and Figure 11 on page 33: The first bullet and Figure 11 indicate that the proposed in-water access ramp for mobility impaired visitors would be located at the juncture of the Springs run and Pretty Sister Spring where in-water visitation would be otherwise precluded. The entry to the Springs run is arguably one of the most important parts of the Springs for manatees since every animal using the Springs basin must enter and exit through that area. Thus, that area is a location where human disturbance of manatees is particularly likely to occur and where human disturbance is most likely to reduce manatee use of the Springs. The Commission therefore recommends that FWS make every effort to relocate the proposed Americans with Disabilities Act (ADA)-compliant access ramp to another area of the Springs basin that would not be closed to in-water visitors or that it redesign the other proposed in-water visitor access to make it ADA-compatible. For example, the Commission suggests it would be preferable to redesign the proposed stair-accessible, in-water access point shown in Figure 10 (page 29) of the revised draft EA into a disabled-accessible ramp.

The Commission is grateful to FWS for its continuing attention to the need to improve manatee protection in Three Sisters Springs. This is a very important action for ensuring the continued process of recovery of Florida manatees. The Commission trusts that the comments and recommendations in this and its previous letter are helpful. Please call if you have questions.

Sincerely,

Rebecca J. Lent, Ph.D.
Executive Director

Enclosure
Mr. Andrew Gude  
Refuge Manager  
Lower Suwannee & Cedar Keys National Wildlife Refuge  
U.S. Fish and Wildlife Service  
16450 NW 31st Place  
Chiefland, Florida 32626

Dear Mr. Gude:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors, has reviewed the Fish and Wildlife Service’s (FWS) August 2015 Environmental Assessment (EA) examining options to protect Florida manatees while affording safe public viewing of animals at the Three Sisters Springs Unit of the Crystal River National Wildlife Refuge. We offer the following comments and recommendations.

BACKGROUND

Three Sisters Springs (the Springs) provides essential warm water habitat for manatees during the winter months. The Springs and the surrounding property were purchased in 2010 by a coalition of federal, state, and local agencies, including the FWS, and non-governmental groups to protect natural habitat vital to endangered Florida manatees. Although title to the property is held jointly by the City of Crystal River and the Southwest Florida Water Management District, it is being managed by the FWS as part of the Crystal River National Wildlife Refuge under a long-term agreement. The Springs is a 1.5 acre basin up to 20 feet deep containing three natural artesian springs that discharge crystal-clear water at temperatures ranging from 72°F to 74°F. The Springs’ discharge exits through a short spring run just 5 feet wide at its narrowest point into an adjacent residential canal. The spring run provides the only water access to the Springs’ basin. In recent years (since 2010) the Springs’ warm-water discharge has provided thermal refuge for hundreds of manatees during winter. Prior to 2010, a previous owner placed large boulders in the run to prevent public access to the basin, which also limited manatee access and forced most animals to remain at the mouth of the spring run to thermoregulate.

As described in the EA, the agreement with the FWS outlines how it will manage the Springs for the purpose of conserving, protecting, and enhancing the Springs’ natural resources (including manatees) while also keeping the Springs open for public recreation and maintaining and sustaining quality visitor experiences. After management of the property was turned over to the FWS in 2010, the boulders blocking the spring run were removed, allowing increased use of the Springs’ basin by both manatees and the public. In addition, the FWS constructed a boardwalk around the basin to allow public viewing of the Springs and manatees. Since 2010 manatee use of the Springs’ basin has increased from a few individuals to hundreds of animals during peak use in winter months. On one day in early 2015, at least 528 manatees were counted in the Springs’ basin, a number approaching 10 percent of the entire state-wide manatee count of 6,033 manatees in February 2015. This makes
Three Sisters Springs the single most important natural habitat for over-wintering Florida manatees throughout the subspecies’ range.

Use by swimmers and boaters (principally snorkelers, kayakers, and canoers) has also increased significantly. In the winter of 2014-15, nearly 20,000 people were counted entering the Springs’ small basin through the spring run during a monitoring study that made counts on 30 days over a two-month period. The highest one-day count of people entering the basin to view manatees was 1,250 people, equivalent to an average of one person passing through the spring run every 15.9 seconds while the park was open (Syverson and Wolfe 2015). This has created a significant management dilemma. People crowding close to resting manatees, including nursing mother-calf pairs, have caused animals to move from place-to-place in the basin or to flee the basin entirely through the narrow spring run that often is choked with swimmers and boaters.

To address these manatee-human interactions during the winter of 2014-15, the FWS adopted interim measures to periodically close the Springs based on manatee use and prevailing conditions to limit public access to the basin and spring run. The FWS also supported the above-mentioned study to monitor human and manatee use of the Springs. The study revealed that manatees were less likely to enter the Springs’ basin when large numbers of people were present and that adverse human-manatee interactions increased as the number of people increased (Syverson and Wolfe 2015). On numerous occasions, animals trying to enter or leave the basin were forced to turn around in the spring run as a result of swimmers and divers blocking the narrow run, thus preventing manatees from exiting or entering the basin. The study results also indicate an inverse relationship between numbers of manatees and people in the Springs, and that the high numbers of swimmers and boaters in the basin degraded the viewing experience for many in-water and boardwalk visitors. Increasing in-water presence of people, as well as manatees, also has increased the rate of shoreline erosion and is threatening to topple trees surrounding the basin.

In light of the increasing level of human disturbance to manatees and shoreline erosion, the FWS is now considering three alternatives to manage the Springs consistent with its obligations to implement a long-term program for protecting Florida manatees while providing opportunities for the public to view wild manatees. Under all of these alternatives, the FWS would retain discretion to implement emergency closures of the Springs to protect manatees, as it did this past winter, and to continue monitoring manatee and human use of the Springs.

ALTERNATIVE ACTIONS UNDER CONSIDERATION

Alternative A: No-Action Alternative

Under this alternative, the FWS would continue the management actions implemented this past winter, including periodic closure of the entire Springs’ basin or portions of it on winter days based on day-to-day assessments of the number of manatees present and various tidal and weather predictions. When the Springs’ basin and run are open for in-water public use, the no action alternative would rely largely on 12 prohibitions adopted as part of the regulations establishing the Kings Bay Manatee Refuge in 2011 to protect manatees and on public outreach efforts urging “passive” observation techniques. While those regulations prohibit various actions, including chasing or pursuing manatees, poking or prodding them, and disturbing or touching resting animals, they do
not preclude swimmers and snorkelers from touching animals in certain situations and they do allow people to approach animals to within inches.

As discussed in its 22 August 2011 letter commenting on the refuge regulations (enclosed), the Commission does not believe the current regulations are adequate to prevent disturbance of manatees, particularly in confined areas crowded with both manatees and swimmers. By allowing people to touch animals in certain situations and approach them to within inches, some people will continue to approach resting and nursing animals in hopes of touching them and, in the process, force animals to move and alter their natural behavior. In addition, people crowding the narrow spring run will continue to interfere with manatees attempting to enter or exit the Springs’ basin. Such actions constitute violations of the Marine Mammal Protection Act’s (MMPA) prohibition on harassing marine mammals. As discussed in the background section above, results of the study conducted this past winter indicate that manatee behavior has frequently been disrupted by human crowding and that use of this habitat by manatees for thermoregulation and nursing has been impeded under the current management program (Syverson and Wolfe 2015).

Although the summary of environmental consequences of Alternative A identified in Table 4 of the EA notes that the no-action alternative would perpetuate the recent increase in manatee disturbance in the Springs, the associated analysis of biological effects (section 2.2.1.2) fails to discuss the documented effects on manatee behavior and their use of the Springs’ basin. Section 2.2.1.2 should therefore be expanded to describe the impact of the increasing and currently unlimited in-water access to the Springs by swimmers and boaters on thermoregulating and nursing manatees using the Springs.

The FWS states that this alternative is inconsistent with management objectives to provide a quality visitor experience compatible with manatee conservation needs and therefore proposes to reject it. The Commission agrees with this conclusion and believes that the demonstrated disturbance of manatees by increasing numbers of swimmers and boaters in the Springs is inconsistent with provisions of the MMPA that prohibit harassment of marine mammals.

**Alternative B: Manatee Viewing from Land Only and Bank Stabilization**

Alternative B would prohibit in-water public access to the Springs during the winter manatee season (15 November to 31 March) and limit public manatee viewing in the Springs’ basin to land-based viewing from the surrounding boardwalk. It would also include a bank stabilization project to reinforce the basin’s eroding shoreline, construction of additional on-shore viewing platforms, and prohibition of pets on the boardwalk to limit the risks of disease transmission. This alternative would virtually eliminate direct human disturbance of manatees in the Springs during winter when manatees are dependent on its warm water, but it would also eliminate in-water recreation opportunities in the basin during that period.

The assessment of effects from this alternative (section 2.2.2) notes that seasonal closure of the Springs’ basin to all in-water public access would allow manatees to use the Springs and the spring run to rest, thermoregulate, and nurse their calves without human disturbance. The estimated additional costs of Alternative B above the no-action alternative for staffing and infrastructure development are $1,055,867 in the initial year(s) and $385,867 in subsequent years for staff salaries. The EA notes that this would meet the FWS management obligation to provide the public with a
high-quality wildlife viewing experience by enhancing land-based visitors’ viewing experiences, but because it is the most restrictive option, it would have the most immediate, though temporary, economic impact on the local manatee tourism industry. Although this option would reduce opportunities to capitalize on public interest in swimming with manatees in the Springs’ unique setting during the winter, the Commission believes that it would continue to yield economic benefits to the local tourism industry over time comparable to current levels.

As noted in the EA, tour operators, local residents, and the public would not be prohibited from in-water recreational activities, including underwater viewing of manatees, elsewhere in Kings Bay. Those opportunities supported a steady growth in businesses catering to in-water viewing of manatees throughout the period when the Springs was in private hands and not open to tour groups. We believe those opportunities could continue to grow under this alternative. In fact, the Commission is concerned that restrictions or prohibitions on in-water activities at Three Sisters Springs could result in an increase in manatee interactions with people outside of the Springs’ basin. As such, we believe the FWS should expand the 12 prohibitions that apply elsewhere in the Kings Bay Manatee Refuge to include at least some of the draft proposed Standards of Conduct contained in the EA for the Springs’ basin. Of greatest importance in this regard are the measures for (1) prohibiting the initiation of contact with or pursuing manatees and keeping hands at your side, crossed in front of you, or behind your back if manatees should approach you, and (2) staying at least 6 feet from all manatees (including all resting manatees; manatees rising to the surface for breath; feeding/nursing manatees; and all female-calf pairs) except if manatees approach you.

With regard to the FWS’s refuge management responsibilities, the Commission believes that Alternative B is the best option for ensuring that (1) manatee protection measures for Three Sisters Springs are consistent with the provisions of the MMPA that prohibit harassment of marine mammals and (2) threats to critical manatee habitat, which must be considered when reviewing the possible delisting of Florida manatees under the Endangered Species Act (ESA), are being properly addressed. Concerning the first point, as noted above, the frequent disruption of natural manatee behavior under the current management system is contrary to the provisions of the MMPA. Alternative B provides the greatest assurance that manatees dependent on warm-water discharge from the Springs will not be disrupted during essential thermoregulatory and nursing behavior. Concerning the second point, the Commission believes that the greatest long-term threat to Florida manatees is reduced availability of natural warm-water habitat necessary to ensure their survival in winter. Although Florida manatees have made substantial progress toward recovery over the past several decades, until there is a sufficient basis for concluding that a network of essential natural warm-water sources – including, but not limited to Three Sisters Springs – will be adequately protected and available over the long-term, we do not believe that current regulatory and management measures will be sufficient to ensure their long-term survival. Because of the importance of the Springs as warm-water habitat for Florida manatees, the Commission believes that prohibiting in-water access to manatees during the winter is the best approach for long-term survival of the Florida manatee population and for enhancing the possibility of the population’s eventual delisting under the ESA.

In summary, the Commission believes that Alternative B is the best option for (1) protecting Florida manatees in Three Sisters Springs, (2) providing the public an opportunity to view wild manatees, and (3) meeting the purposes and objectives of the MMPA and the ESA, and (4) complying with FWS obligations under its agreement to manage the property as part of the Crystal
River National Wildlife Refuge. Accordingly, the Commission recommends that the FWS adopt Alternative B, which would prohibit in-water public access to the Springs during the winter manatee season, stabilize the Springs’ shoreline to prevent erosion, and enhance surrounding land-based public viewing facilities. Furthermore, the Commission recommends that the FWS expand the 12 prohibitions that now apply throughout the Kings Bay Manatee Refuge to include at least some of the draft proposed Standards of Conduct, including (1) a prohibition on initiating contact with or pursuing manatees and keeping hands at your side, crossed in front of you, or behind your back should a manatee approach you, and (2) staying at least 6 feet from all manatees (including all resting manatees; manatees rising to the surface for breath; feeding/nursing manatees; and all female-calf pairs) except when manatees approach you.

**Alternative C: Proposed Action: Limited In-Water Human Access and Bank Stabilization**

This alternative is similar to Alternative B but with the major difference that, during the winter manatee season, limited in-water access by snorkelers and underwater photographers would be allowed subject to accompaniment by an FWS-certified guide operating under one of five Special Use Permits (SUPs) issued by Refuge managers. Each SUP holder could have five guides authorized to escort in-water tours of up to four snorkelers or one photographer at a time. Tour members would be charged a fee and tours would be conducted on a schedule that would allow a total of no more than 29 people (including guides and tour members) in the Springs’ basin at any one time. All public access through the spring run would be prohibited and in-water tours would instead enter the water via a floating dock constructed along the margin of the basin. At the Refuge Manager’s discretion, tour participants could be restricted to the middle part of the Springs’ basin and lobes on either end of the basin could be closed off to in-water visitors. Vendors with SUPs also would be required to have their guides and tour members adhere to a set of “Standards of Conduct” that exceed manatee protective restrictions now imposed under the existing Kings Bay Manatee Refuge regulatory requirements. Among other things, those standards would prohibit initiating contact with any manatee or approaching them closer than six feet. Should a manatee swim up to snorkelers and come closer than six feet, snorkelers would be directed to keep their hands at their sides, crossed in front of them, or behind their backs. Limited in-water access could also be authorized for management and research purposes and for commercial photographers after review of the proposed actions.

The assessment of effects for this alternative (Section 2.2.3) states that closure of the narrow spring run to public access during the manatee season would enable manatees to enter and exit the spring with little if any potential disturbance and that, given access to no-entry areas established at either end of the basin, manatees would be able to retreat to those areas to rest and nurse their calves undisturbed, even while guided tours are conducted elsewhere in the Springs’ basin. The FWS estimates that the additional agency administrative costs for this alternative would be $660,771 in initial expenditures and $385,771 in subsequent annual staff salaries above the no-action alternative. It also states that this alternative would enhance and improve the public’s wildlife viewing experience and increase protection in the area overall while continuing to provide for sustainable nature-centered tourism.

Although the FWS identified this option as its preferred alternative, as discussed above, the Commission does not believe this is the best alternative for promoting manatee protection. It also does not believe Alternative C would afford the best possible opportunity for public viewing of
manatees in an undisturbed natural warm-water spring setting. We agree, however, that it would substantially reduce manatee harassment and disturbance within the Springs and would be preferable to the no-action alternative. Prohibiting paddle craft, limiting the number of snorkelers, closing access via the spring run, and establishing no-entry areas would significantly reduce the potential for disturbing manatees. The draft proposed Standards of Conduct, which go beyond the 12 regulatory measures now specified in Refuge regulations, would prevent deliberate contact with manatees and approaching them closer than six feet. Those standards constitute important, constructive measures that would significantly reduce harassment. The requirement for small groups of snorkelers to be accompanied by FWS-certified guides also would provide an important means of assuring that in-water visitors adhere to the Standards of Conduct.

The Commission recognizes that some believe in-water access to the Springs’ basin to view manatees in winter is appropriate and this alternative would to address those interests. In setting forth this alternative, however, we believe that the number of persons allowed in the Springs’ basin at any one time (i.e., up to 29 people) is likely to be too high to prevent crowding-related manatee disturbance even if the two end lobes of the Springs’ basin are closed to human access. The Commission therefore believes that this recommendation should clarify that the Refuge Manager would retain authority to either (1) close the entire Springs basin if the number of manatees in the Springs’ basin exceeds a certain number of animals (e.g. 100 manatees) or predicted conditions (e.g., tides, winds, and water temperatures outside the Springs) indicate large numbers of manatees will seek to enter the Springs, or (2) reduce the number of people allowed in the Springs’ basin at any one time if monitoring results indicate that manatees are still being disturbed under the proposed cap of 29 people at a time. The Commission also believes that the Standards of Conduct proposed in Alternative C (Appendix VI) should be expanded to incorporate the twelve prohibitions under the Refuge’s existing manatee regulations to ensure that visitors are aware of those restrictions as well. Those standards should be revised to clarify that in-water visitors should:

- Move slowly and avoid sudden movements;
- Avoid any movements that could stir up sediment and reduce water clarity for other visitors;
- Limit the number of people within a certain distance of an individual manatee at any one time (e.g., no more than three people within 15 feet);
- Limit the amount of time that an individual snorkeler remains within 15 feet of a manatee (e.g., no more than a few minutes or less) to allow other snorkelers a closer view of the animal;
- Avoid drinking the Springs water due to possible contamination by manatee feces;
- Stay within a certain distance of their tour guide (e.g., 50 feet); and
- Obey all instructions provided by the guide and leave the water promptly when instructed to do so.

In addition, the Commission believes that SUPs issued to tour vendors should be conditioned to require that:

- Guides provide verbal briefings and written copies of the Standards of Conduct to all tour participants before tours leave for the Springs as part of their pre-tour preparations;
- Guides provide a map of the Springs showing areas closed and open to snorkelers as part of their pre-tour preparations and briefings;
Guides terminate tours immediately if tour members fail to either follow the Standards of Conduct or obey tour guide instructions;

The number of tours per day, their size, and time limits are subject to change at any time at the discretion of the Refuge Manager based on consideration of needs for manatee conservation, habitat protection, and/or public safety, although all due effort will be made to provide as much advance warning as possible of any such changes.

Finally, we note that the estimated staffing costs are less for Alternative C than those for Alternative B even though they would include the same efforts to improve and promote land-based observations. The lower cost is due to reduced staffing. The Commission questions why staffing needs for law enforcement and environmental education specialists would differ Under Alternative C as compared to Alternative B. In-water activities would be greater under Alternative C than Alternative B which presumably would increase, not decrease, the need for an enforcement presence. In addition, there is nothing to suggest that the number of boardwalk visitors and their interpretation needs would be any lower under Alternative C than Alternative B. The Commission therefore believes that the FWS should either identify the same staffing needs under Alternatives B and C, or expand the EA to explain why fewer enforcement and environmental education staff are warranted under Alternative C as compared to Alternative B.

I hope these comments and recommendations are helpful. Please let me know if you have any questions.

Sincerely

Rebecca J. Lent, Ph.D
Executive Director

Enclosure
Attn: FWS-R4-ES-2010-0079
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive, Suite MS 2042-PDM
Arlington, VA 22203

To Whom It May Concern:

The Marine Mammal Commission in consultation with its Committee of Scientific Advisors has reviewed the Fish and Wildlife Service Federal Register Notice (76 FR 36493) and associated Draft Environmental Assessment proposing rules to establish a manatee refuge in Kings Bay, Citrus County, Florida. We offer the following recommendations and comments.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the Fish and Wildlife Service—

- adopt the proposed rule that would establish year-round slow-speed requirements in all areas of the refuge not otherwise designated as either idle speed zones or no-entry manatee sanctuaries;
- (1) adopt alternative D in its draft environmental assessment, which would establish the proposed Kings Bay manatee refuge and (2) expand its list of prohibited activities to include petting, touching, rubbing, or attempting to pet, touch, or rub, any manatees and approaching them closer than 10 feet; and
- modify its draft environmental assessment by providing a more complete analysis of the no-touching and stand-off distance requirements, including points discussed in this letter.

RATIONALE

The complex of springs in Kings Bay at the head of the Crystal River is a winter warm-water refuge used by a large and increasing number of Florida manatees. From 2000 to 2005 maximum one-day winter counts ranged from 150 to 300 individuals and from 2006 to 2010 they ranged from 250 to 550 individuals. More manatees also are using the bay in non-winter months, necessitating manatee protection year-round. In the early 1980s the Fish and Wildlife Service purchased the islands in the bay and some surrounding water bottoms. In 1983, it designated those areas as the Crystal River National Wildlife Refuge to protect manatees.

At the same time, the number of people using the bay also has increased steadily. The increases in both manatees and recreational use have resulted in growing numbers of watercraft-related manatee deaths and reports of manatee harassment. To address those problems, the Service now proposes new rules under the Marine Mammal Protection Act to designate all areas of Kings Bay and its adjacent canals and waterways as a manatee refuge. The intent of the refuge would be to (1) prevent manatee deaths and injuries by reducing boat speeds and (2) prevent harassment of manatees by swimmers and divers by adjusting the size of no-entry manatee sanctuaries and clarifying restrictions on swimming and interacting with manatees.
Rules to restrict boat speed

The Marine Mammal Commission recommends that the Fish and Wildlife Service adopt the proposed rule that would establish year-round slow-speed requirements in all areas of the refuge not otherwise designated as either idle speed zones or no-entry manatee sanctuaries. In effect, this provision would eliminate an existing water sports area in the center of Kings Bay where, currently, boats are allowed to travel at 35 miles per hour (mph) during the day and 25 mph at night between 1 May and 30 August. Over the past 10 years several manatees have been struck and killed in that area during the summer. The Commission commends the Service for addressing this need.

Rules to prevent manatee harassment

Current regulations do not define harassment specifically for Florida manatees. To prevent manatee harassment, the proposed rule would (1) maintain seven existing no-entry manatee sanctuaries that are closed from 15 November through 31 March, (2) authorize the establishment of temporary no-entry areas adjacent to the existing manatee sanctuaries and at small springs not currently included in manatee sanctuaries if refuge staff deem them necessary based on manatee or human use patterns, and (3) prohibit throughout the year 13 specified activities likely to harass manatees. Those activities include chasing or pursuing manatees; disturbing or touching resting or feeding manatees; poking, prodding, or stabbing manatees; standing on manatees; giving manatees anything to eat or drink; and separating mothers from calves. Having such an explicit list in the regulations helps clarify which actions constitute harassment for manatees, resolves related ambiguities, and offers much needed guidance to the public and enforcement officers.

The Marine Mammal Commission commends the Fish and Wildlife Service for its attention to long-standing harassment problems at this location. However, more could and should be done. Over the past 10 years the Marine Mammal Commission has written several letters to the Service expressing concern about escalating manatee harassment by swimmers and divers viewing wild manatees in Kings Bay. The Commission has recommended that the Service adopt rules to prohibit divers from touching manatees or approaching them closer than 10 feet. The Commission believes that escalating numbers of harassment reports have been directly related to policies that allow divers to pet and rub wild manatees and to approach animals to within inches. Those policies lead to situations where too many people bend or disregard non-regulatory guidance on diving etiquette around manatees in hopes of getting close enough to pet them. In the end, too many divers either chase manatees that do not wish to be petted or approach them so closely that it disrupts their normal behavior.

Although the proposed rules partially address those concerns by prohibiting the touching of resting or feeding animals, they still allow people to approach and pet or rub manatees that are not feeding or resting. The proposed rules also still allow people to approach any animals, including those that are resting and feeding, to within inches. The precise distance at which normal manatee behavior will be disrupted by approaching divers undoubtedly varies depending on many factors including the individual tolerances of different manatees, their behavior at the time, the number and behavior of divers, and whether the approached animals are alone, in groups, or mother-calf pairs. Although manatees in Kings Bay are accustomed to having divers near them, divers approaching...
animals to within inches are likely to disturb them at some point and the divers will not know when to stop until the manatees react and move away. At that point, it is too late to avoid disturbance.

The Service included no-touch and minimum approach provisions in Alternative D of the draft environmental assessment for the proposed rules. However, the analyses of those provisions and reasons for rejecting them are incomplete and, in the Commission’s view, not well reasoned. The Service appears to have concluded that petting and rubbing a small set of more tolerant manatees does not constitute harassment as defined under the Marine Mammal Protection Act. The Commission recognizes that interactions between divers and certain manatees that invite contact with people may not annoy, disturb, or harm them. The problem is that divers do not always know which animals enjoy such contact. As a result, divers hoping to touch a manatee approach, disturb, and harass many manatees that shun human contact.

In addition, the acclimation of manatees to humans may put them at added risk in other areas. Manatee interactions with humans are not always benign. The state’s salvage and necropsy program has documented numerous cases where manatees have been shot, maimed, or defiled by people who may consider them pests or feel animosity toward them because of unwelcome boat speed regulations or other protection measures. Such incidents are known to occur in Kings Bay. For example, in 2007 when the Commission last wrote to the Service recommending a no-touch and 10-foot approach limit, one manatee in Kings Bay had recently been spray-painted and another had a garden rake embedded in its back. Policies that condone touching animals effectively condition and reinforce unnatural behavior patterns that may lead some animals to approach people and boats. Such behavior by wild animals is well recognized by wildlife managers as detrimental to them and to be discouraged because it creates nuisance animals and can lead to their death or injury. Indeed, such concerns are a prominent reason for established prohibitions on feeding and watering manatees. The draft environmental assessment does not describe this risk. The Commission believes that if people stopped reinforcing this approach behavior by manatees seeking to be petted or rubbed, such behavior could be extinguished over time and that stopping or reducing such behavior should be a goal of the Service’s manatee conservation program. The Service should note that a no-touch policy would be essential for accomplishing that objective.

The Commission also notes that any proposed rule that allows divers to touch manatees in certain situations is inconsistent with “Marine Wildlife Viewing Guidelines” prepared by Watchable Wildlife, Inc., and officially endorsed by the Service as well as other federal wildlife management agencies. Two of the first three viewing guidelines are “hands-off” (i.e., never touch, handle, or ride marine wildlife) and “keep your distance.” The reasons for those standards include the need to prevent or extinguish behaviors that cause animals to approach people or sites of human activity. Furthermore, the Service recently revised its diver education materials, including the “Manatee Manners” video, to promote passive viewing. Passive viewing can only mean no deliberate touching. If the Service intends to promote passive manatee viewing and its endorsement of the Marine Wildlife Viewing Guidelines is sincere, it should reinforce that message with regulations that are consistent with those principles by prohibiting all touching of manatees in the wild.

1 Watchable Wildlife, Inc. “Marine Wildlife Viewing Guidelines”
The sole reason cited in the draft environmental assessment for rejecting a no-touch prohibition is the following:

(It) would be difficult to enforce in light of the fact that manatees knowingly approach and, on occasion, initiate physical contact with people. Distinguishing between a manatee-initiated approach and contact and a person-initiated approach and contact could be difficult.

This statement is incomplete and unconvincing. Although manatees may approach divers and present themselves to be petted or rubbed, it is our understanding that manatees rarely rub against divers who do not reciprocate by petting or rubbing them. In any case, we see no reason why it should be prohibitively difficult to distinguish between divers who deliberately reach out to pet or rub a manatee from divers who are approached but do not rub or pet them. The statements asserting enforcement difficulty should either be deleted or revised to explain why enforcement personnel cannot readily distinguish between divers reaching out and petting or rubbing animals and a manatee approaching and rubbing against a person.

The Service also should impose a minimum approach distance. As noted above, divers will not know at what distance their presence will disturb a manatee until after the animal reacts. Under the proposed rules, as long as divers do not pet animals, they would be allowed to approach any animals, including those that are feeding or resting, to within inches. Although some manatees have a high degree of tolerance to swimmers and most are accustomed to having people in the water near them, most animals so approached would alter their behavior and begin to move away even if they are not touched. On this point, the draft environmental assessment notes that when many people are in the water near manatees, the animals often mill around and are less likely to engage in feeding or resting. That is, their normal behavior has been disrupted. Allowing divers to approach and pet milling animals would prevent them from resuming normal feeding and resting behavior.

The Commission believes a 10-foot approach distance would significantly reduce manatee disturbance, reinforce a no-touch provision, and allow disturbed manatees to resume their normal behavior more rapidly. In the clear waters of Kings Bay, a 10-foot approach limit would still offer divers an exceptional opportunity to view wild manatees at close range, far closer than they are likely to get to any other large wild animal. This restriction would not diminish a diver’s experience or reduce Kings Bay’s reputation as a premiere diving destination for viewing wild manatees in their natural habitat.

In the draft environmental assessment the main justification for rejecting a provision to establish a fixed approach distance is that “it would be...difficult to enforce given inherent difficulties associated with gauging distances in and on the water.” As noted above, past Commission letters have recommended a very modest 10-foot approach limit to reduce potential manatee disturbance. This distance is roughly the length of adult manatees. Even though it may be difficult to gauge distances under water, at that distance there should be little difficulty for either divers or enforcement officers to determine when they are closer than a body length from the animal being approached or watched.
The draft environmental assessment also asserts that it would be difficult for an enforcement officer to determine if an animal is moving toward a diver. This reason for rejecting an approach limit also is flawed. An enforcement officer should be able to determine if a manatee was moving toward a diver (in which case it would be facing directly towards the diver) or if the diver was moving toward the manatee (in which case the diver most likely would be approaching the animal from an angle other than head on and the diver’s movements should be indicative of his/her intent). Indeed, similar judgments are necessary to distinguish between divers who are chasing a manatee (which is prohibited under the proposed rules and apparently is enforceable) and divers who are simply following or approaching moving animals. Accordingly, the statement in the draft assessment suggesting that approach distances are too difficult to enforce should either be deleted or further discussion should be added explaining why enforcement officers or divers could not determine when the animals being approached are closer than a body length.

Finally we note that regulations allowing divers to approach manatees within inches and touch them have repercussions on other wildlife protection efforts. At past Marine Mammal Commission annual meetings, representatives of the National Marine Fisheries Service have noted that their efforts to promote no-touch and approach distance limits for dolphins and other marine mammal species under its jurisdiction have been undercut by Fish and Wildlife Service policies allowing people to touch manatees and approach them to within touching distance. That is, members of the public argue that, because there are no such standards for manatees, they should not be necessary for other marine mammals. It is our understanding that the National Marine Fisheries Service has made this point directly to the Fish and Wildlife Service and urged that manatee harassment policies and regulations be made consistent with the Watchable Wildlife Guidelines to avoid such mixed messages. If the Fish and Wildlife Service continues to reject the no-touch and minimum approach distance standards, it will undermine management efforts for other marine mammal species. The draft environmental statement should be expanded to identify and discuss the full consequences of no-touch and minimum approach distance standards.

To address the above points, the Marine Mammal Commission recommends that the Fish and Wildlife Service (1) adopt alternative D in its draft environmental assessment, which would establish the proposed Kings Bay manatee refuge and (2) expand its list of prohibited activities to include petting, touching, rubbing, or attempting to pet, touch, or rub, any manatees and approaching them closer than 10 feet. The Commission also recommends that the Service modify its draft environmental assessment by providing a more complete analysis of the no-touching and stand-off distance requirements, including points discussed in this letter.

Please contact me if you have questions about our recommendations or rationale.

Sincerely,

[Signature]

Timothy D. Ragen, Ph.D.
Executive Director