

**FINDING OF NO SIGNIFICANT IMPACT**  
**Manatee Wildlife Viewing on Crystal River National Wildlife Refuge**  
Citrus County, Florida  
Environmental Assessment

The U.S. Fish and Wildlife Service (Service) proposes a number of significant management measures to better protect endangered Florida manatees in Three Sisters Springs and improve visitors' wildlife viewing experience through improved crowd management and safety for the 2014-2015 winter season. Proposed are two cordoned-off and closed no-public entry areas inside Three Sisters Springs to prevent disturbance of manatees, a divide of the spring run canal to separate manatees and humans entering/exiting the springs, and a ban of all watercraft from November 15, 2014, to March 31, 2015. In addition, the entire Three Sisters Springs may be closed to all public entry, via the water, for specific times during cold weather events to further safeguard the physiological survival needs of resting manatees.

The Service has analyzed a number of alternatives to the proposal, including the following:

**I. NO ACTION ALTERNATIVE**

Under the 'No Action Alternative', the Crystal River National Wildlife Refuge (NWR) would not implement any management measures under the National Wildlife Refuge Administration Act in the warm water springs located at Three Sisters Springs except for those measures already identified in the Kings Bay Manatee Protection Area Rule for extreme cold weather events, in the 12 prohibitions, and in the Management Agreement of 2010 and Three Sisters Springs Project Management Plan (Florida Communities Trust 2012). The Three Sisters Springs would remain open to the public for kayaking/canoeing, swimming, and snorkeling during the winter months while manatees are using the springs, with no additional improvements in management.

**II. PROPOSED ACTION ALTERNATIVE**

Under the 'Proposed Action Alternative', the Service would implement the following precautionary measures under the National Wildlife Refuge Administration Act for the 2014 – 2015 manatee winter season enabling the Service to avert the potential for disturbance of manatees associated with watercraft and incompatible manatee viewing activities:

1. Continue to implement temporary full closures to prohibit visitation inside the warm water springs located at Three Sisters Springs during extreme cold weather events and to avoid violations of the 12 prohibitions identified by the Kings Bay Manatee Protection Area Rule.
2. Install an in-water, non-motorized vessel tie-up/disembarking area east of the warm water springs located at Three Sisters Springs, and allow management flexibility to prohibit vessels and large inflatable floats within the spring heads as well as the spring run in order to prevent manatee disturbance and potentially

unsafe encounters with swimmers. Refuge staff and volunteers may use non-motorized vessels inside Three Sisters Springs to monitor human-manatee interactions. In-water access by non-motorized vessel for mobility-impaired individuals to Three Sisters Springs during manatee season will be provided through Special Use Permit only.

3. Guide the public to use the western half of the spring run extending into the warm water spring heads located at Three Sisters Springs to maintain an open channel for manatee ingress and egress.
4. Create two expanded no-public entry areas within the spring heads by closing the eastern and western lobes known as Pretty Sister and Little Sister located on Three Sisters Springs.
5. Require a Special Use Permit for the use of any type of flash photography inside the warm water springs at Three Sisters Springs. Special Use Permits for diffused flash photography will only be issued for educational or research purposes. Permits issued by the Services Division of Management Authority will be recognized by Crystal River NWR for use of flash photography if photographers are a minimum of 20 feet from all manatees.
6. Amend Special Use Permit conditions for Commercial Wildlife Observation Guides using the warm water springs at Three Sisters Springs to require the following specific stipulations: a City of Crystal River business license or exemption letter, in-water insurance for their clients, and an in-water guide to accompany the clients into the Three Sisters Springs.
7. Implement an expedited communication plan to actively inform visitors and stakeholders of the proposed action.

The 'Proposed Action Alternative' was selected over other alternatives because these interim measures address the potential for disturbance of manatees associated with watercraft and incompatible manatee viewing activities. Within the authority of the National Wildlife Refuge Administration Act and the Management Agreement of 2010, the Service is directed to maintain public access to the warm water springs at Three Sisters for recreation and quality visitor experiences while simultaneously providing adequate protection for manatees. Importantly, the warm water springheads at Three Sisters Springs provide vital habitat to hundreds of manatees during cold-weather conditions and are considered among the highest priority thermal refuges for the species throughout its range (FCT 2012). The 'Proposed Action Alternative' provides for a managed balance of visitors' and manatees' use of this resource.

This alternative implements adaptive management measures/strategies to address concerns related to increased crowding between manatees and the public inside the warm water springs at Three Sisters Springs for the 2014-2015 manatee winter season. These interim measures will be evaluated, monitored, and adapted to assist in developing long-term, integrated and adaptive management actions to be implemented under the Comprehensive Conservation Plan (CCP).

### III. IMPACTS AND MITIGATION

Implementation of the 'Proposed Action Alternative' is expected to result in few, if any, environmental, social, and economic effects. Given the limited geographic area of the proposed alternative, (1.5 acres) and the temporary duration of the alternative (November 15 - March 31), and the fact that manatee viewing can be experienced throughout Kings Bay, no cumulative effects are likely. The information gathered from the temporary management actions may be used to guide future management actions at Three Sisters Springs, but any specific management actions will only apply to in-water activities in Three Sisters Springs.

Measures to prevent adverse effects have been incorporated into the proposal. These measures include:

1. Installing an in-water, non-motorized vessel tie-up/disembarking area east of the warm water springs located at Three Sisters Springs.
2. Allowing visitors and recreationalists to enter the deepest, largest lobe of the warm water strings at Three Sisters Springs, via the spring run, daily during the November 15 - March 31 manatee winter season.
3. Providing a designated area for swimmer access and enhanced safety via the spring run at Three Sisters Springs during the November 15 - March 31 manatee winter season.
4. Providing a permit process for flash photography in support of educational and research purposes at Three Sisters Springs during the November 15 - March 31 manatee winter season.
5. Providing for continued public manatee-viewing access via the boardwalk around the Three Sisters Springs regardless of open or closed status of the springs themselves.

The proposal is not expected to have any significant adverse effects on wetlands and floodplains, pursuant to Executive Orders 11990 and 11988, because of the limited size and scope of these measures. The proposed management measures would only apply to manatee viewing activities in the 1.5-acre warm water springs at Three Sisters Springs. No management actions are proposed to the springs themselves.

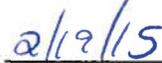
The proposal is not expected to have any significant effects on the human environment because: while this alternative would reduce and/or restrict some users from some access to some of the interior of the warm water springs at Three Sisters Springs, the improved wildlife viewing opportunities may also provide some positive economic opportunities. The Service acknowledges that this alternative may have some local economic effect. However, the public's support for manatees and their protection have been examined through contingent value studies (Solomon et al. 2004; Bendle and Bell 1995; Fishkind and Associates 1993). These economic studies characterized the value placed by the public on this resource and determined that the public's 'willingness to pay' for manatee protection is significant and that public support for manatee protection regulations in general, such as that described in this alternative, exists. Therefore, any long-term effects on the overall local economy are expected to be negligible.

#### IV. DETERMINATION

The proposal has been thoroughly coordinated with all interested and/or affected parties. Parties contacted include: the Service's North Florida Ecological Services Office; City of Crystal River, Southwest Florida Water Management District; Florida Fish and Wildlife Conservation Commission; U.S. Geological Survey manatee researchers; local stakeholders; interested parties; community groups; and national and local non-government organizations.

Therefore, it is our determination that the proposal does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). As such, an Environmental Impact Statement (EIS) is not required. An environmental assessment has been prepared in support of this finding and is available upon request to the Service facility identified above.

  
\_\_\_\_\_  
Regional Chief, National Wildlife Refuge System  
*for*

  
\_\_\_\_\_  
Date

## References

- Bendle, B.J. and F.W. Bell. 1995. An estimation of the total willingness to pay by Floridians to protect the endangered West Indian manatee through donations. Prepared for Save the Manatee Club and the Florida Department of Environmental Protection – Bureau of Protected Species Management. November. 61 pp. + appendices.
- Crystal River National Wildlife Refuge Comprehensive Conservation Plan (pre-final DRAFT in progress). U. S. Department of the Interior, U. S. Fish and Wildlife Service Crystal River, Florida.
- Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended -- Public Law 93-205, approved December 28, 1973, repealed the Endangered Species Conservation Act of December 5, 1969 (P.L. 91-135, 83 Stat. 275). The 1969 Act had amended the Endangered Species Preservation Act of October 15, 1966 (P.L. 89-669, 80 Stat. 926).
- Environmental Assessment: Manatee Wildlife Viewing on CRYSTAL RIVER NATIONAL WILDLIFE REFUGE, THREE SISTERS SPRINGS, Citrus County, Florida. U. S. Department of the Interior, U. S. Fish and Wildlife Service Crystal River, Florida. January 2015.
- Fishkind & Associates. 1993. Economic impact of the Manatee Sanctuary Act. Technical Report. Prepared for the Volusia County Board of County Commissioners. February.
- Florida Communities Trust [FCT]. 2012. Three Sisters Springs Project Management Plan. A Project of: The City of Crystal River, The U.S. Fish and Wildlife Service, and The Southwest Florida Water Management District. Florida Communities Trust (FCT) Project #08-088-FF8.
- Kings Bay Manatee Protection Area Rule. Code of Federal Regulations. Title 50, Pt. 17.103, 2000 ed. (50CFR17.103)
- Management Agreement for Certain Land Located Within the City of Crystal River, Citrus County, State of Florida (regarding Three Sisters Springs property). City of Crystal River, U.S. Fish and Wildlife Service, and the Southwest Florida Water Management District. July 2010.
- Solomon, B.D, C.M. Corey-Luse, and K.E. Halvorsen. 2004. The Florida manatee and ecotourism: toward a safe minimum standard. *Ecological Economics* 50:101-115.

**CHECKLIST FOR THE CONTENTS OF A  
FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

FONSI Title: \_\_\_\_\_

\_\_\_\_\_

Environmental Assessment (ES) Title: \_\_\_\_\_

\_\_\_\_\_

Reviewer: \_\_\_\_\_

Date of EA: \_\_\_\_\_ Date of FONSI: \_\_\_\_\_

**PART 1: CEQ REGULATIONS, 1508.13**

1. Does the FONSI include the EA, or a summary of the EA? 1508.13  
Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_
2. If the FONSI includes the ES, does the FONSI incorporate by reference discussions in the ES rather than repeat those discussions? 1508.13  
Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_
3. Does the FONSI present the reasons why an action will not have a significant effect on the human environment? 1508.13  
Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_
4. Does the FONSI state whether any other documents are related to it? 1508.13  
Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_

**PART 2: PUBLIC AVAILABILITY**

5. Does the FONSI indicate how it will be made available to the affected public? 1501.4(e)(1)  
Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_

6. Does the FONSI state whether it has been prepared on an action which:  
- is, or is similar to, one which normal requires the preparation of an EIS, or

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_

- is without precedent? 1501.4(e)(2)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_

7. If the action is or is similar to one which normally requires and EIS, or is one without precedent, does the FONSI state whether it will be available for public review for 30 days before the agency makes its final determination whether to prepare and EIS? 1501.4(e)(2)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_

#### PART 3: SUBJECTIVE FONSI STANDARDS

8. Does the FONSI include only brief discussions of other than significant issues, with only enough discussion to show why more study is not warranted? 1502.2(b)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_

9. Is the FONSI brief: 1508.13

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_

#### PART 4: LEGAL STANDARD OF REVIEW

10. Does the FONSI show that the agency “reasonably concluded” that the project will have no significant adverse environmental consequences? City of Davis vs. Coleman, 521 F.2d 661, 673 (9th Cir. 1975).

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_

11. An EIS is required whenever a proposed action “may cause a significant degradation of some human environmental factor.” City of Davis vs. Coleman, 521 F.2d 661, 673 (9th Cir. 1975) (emphasis original). Does the FONSI show that the alternatives including the proposed action will not significantly degrade some human environmental factor?

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s) \_\_\_\_\_

12. Is the FONSI prepared according to the agency's own guidelines? Portela vs. Pierce, 650 F.2d 210, 213 (9th Cir. 1981).

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)

13. Does the FONSI show that it precedes the agency's final decision on the proposed action? (FONSI pitfall #1) This is unnecessary; it is a relic from our less-compliant days.

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)

14. Neutral facts do not support a FONSI. Do facts stated in the FONSI show how they support a finding of no significance? (FONSI pitfall #4)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)

15. MITIGATION MEASURES

- "(C)hanges in the project are not legally adequate to avoid an impact statement unless they permit a determination that such impact as remains, after the change, is not significant." Cabinet Mountains Wilderness/Scotchman's Peak Grizzly Bears vs. Peterson, 685 F.2d 678 (D.C. Cir. 1982). Does the FONSI show that the mitigation measures reduce impacts below the threshold of significance?

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)

- Agencies "should not rely on the possibility of mitigation as an excuse to avoid the EIS requirement." Cabinet Mountains Wilderness/Scotchman's Peak Grizzly Bears vs. Peterson, 685, F.2d 678 (D.C. Cir. 1982) (emphasis added). Does the FONSI show that the agency is committed to the mitigation measures (i.e. that the proposed action will not be taken without the measures)? (FONSI pitfall #3)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)

16. Do all alternatives discussed in the EA appear in the FONSI? (FONSI pitfall #2)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)

17. Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial. 40 C.F.R. § 1508.27(b)(1). Does the FONSI show that beneficial, as well as adverse impacts will not be significant? (FONSI pitfall #6)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)

18. Does the FONSI present the reasons why the action will not have a significant effect on the human environment? 40 C.F.R. § 1508.13. (FONSI pitfall #5)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)

19. Are all effects described in the EA taken into account in the FONSI? (FONSI pitfall #7)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)

20. Are environmental standards the sole evidence of non-significance? (FONSI pitfall #8)

Yes \_\_\_\_\_ No \_\_\_\_\_ Page(s)