2016 – 2017 Three Sisters Springs In-Water Management – Questions and Answers

1) What management tools will the US Fish and Wildlife Service use to manage Three Sisters Springs this winter?

The Crystal River National Wildlife Refuge staff will use updated protocols for the day-to-day management of the Three Sisters Springs basin during this coming winter. These protocols include the use of environmental and biological factors to determine closure status of the springs. In addition, The Crystal River National Wildlife Refuge will continue to implement the measures from the 2014-2015 Three Sisters Springs emergency environmental assessment, which include: lobe closures of western and eastern spring lobes (underwater markers), and vessel exclusion from the interior of the springs throughout the winter.

2) Are these protocols any different than the last year's protocols used at Three Sisters Springs?

The protocols that are to be implemented during this winter are very similar to last year's protocol. The distribution of manatees in the interior of the springs and other environmental conditions will be the main factors in the day-day decision making process. These modifications are based on the results from the latest research conducted at Three Sisters Springs.

3) Where can I find the Three Sisters Springs winter management protocol and the flowcharts?

The protocol and flowcharts can be found on the refuge's homepage: www.fws.gov/crystalriver including description of the protocol's guidelines and the Three Sisters Springs winter management news release.

4) What Kings Bay areas will this protocol affect?

This protocol will be used only to manage the interior of the Three Sisters Springs basin. The other Kings Bay springs and waters are not undergoing any new restrictions, regulations or protocols.

5) What research are these protocols based on?

The main research that led to this protocol is the study conducted by Dr. Rae Ellen and Carl Wolfe titled: "Manatees, People and Three Sisters Springs", also found in the refuge's website: www.fws.gov/crystalriver

6) Does this protocol reflect any of the proposed measures from the latest in-water Environmental Assessment for Three Sisters Springs?

No, there is nothing in this protocol related to the latest draft In-water Three Sisters Springs Environmental Assessment. However, this protocol will serve as the temporary management scheme at Three Sisters Springs until the final Environmental Assessment is implemented. The Environmental Assessment will likely be implemented during the 2017-2018 manatee season.

7) Who will be responsible for overseeing the day to day implementation of the protocol?

Only trained, uniformed refuge staff will make recommendations to the refuge manager who makes the final decision of closing or opening the springs.

8) Will this new protocol increase the number of closures at Three Sisters Springs throughout this winter compared to previous winters?

Not necessarily. Since the first closure at Three Sisters Springs went into effect on 2014, the number of closures at Three Sisters Springs has been directly correlated with the Gulf temperatures, tides and manatee numbers and distribution in the interior of the springs. Although this year's protocol focuses more on manatee distribution rather than manatee numbers, the number of closures will be mainly associated with the degree of cold weather we experience this year. For instance, last year closures only took place in January and February due to the relatively warm winter experienced. However, if we experience a similar winter to that of 2010, closures could start taking place from early winter (November) to late winter (March).

9) How will you keep the general public informed about closure/openings of Three Sisters Springs?

Daily updates of Three Sisters Springs' closures and openings will be available in the refuge's website: www.fws.gov/crystalriver, under icon: "Important Information", which prompts viewers to the Refuge's Facebook page. A Facebook account isn't needed to view the updates on this Facebook link. For those wanting to link directly to the Facebook page without going through the website, please visit: www.facebook.com/crystalrivercomplex

10) Have previous closure impacted other Kings Bay areas in terms of overcrowding and boat traffic?

When it comes to boat traffic impacts in other Kings Bay areas, the answer is no. Regardless of whether Three Sisters Springs is open or closed, the boat traffic outside by the Three Sisters Springs sanctuary, for the most part remains the same. This is because all in-water visitors go to see manatees at the sanctuary just outside the springs via a vessel, and all vessels must remain outside of the springs regardless of whether the springs are open or closed to swimmers. The vessel exclusion measure is not part of this protocol for it has been in place since March, 2015. During closed days, visitors will not have in-water access to Three Sisters Springs, but may choose other places in Kings Bay to view manatees, such as Idiots Delight or King Spring. Those other areas have not suffered vessel congestion like the area immediately outside of Three Sisters Springs has. Closures of the Three Sisters Springs may actually alleviate the vessel congestion just outside of Three Sisters Springs instead of worsening it.

However, the area immediately outside of Three Sisters Springs may experience a higher volume of snorkelers when compared to opened days. Other springs in Kings Bay may see an increase of visitors, as well. For example, King Spring, visitation was very high last winter when Three Sisters Springs was closed.

11) What can visitors do when Three Sisters Springs is closed?

Visitors interested in snorkeling at Three Sisters Springs would have to choose other areas in Kings Bay to view manatees, either while in-water or from land. Some other in-water viewing areas in Kings Bay include the Three Sisters Springs canal outside of the springs, the King Spring adjacent to Banana Island, Jurassic Springs located at Hunters Cove, or the area immediately outside of Magnolia Springs. Some land base areas to view manatees include the Three Sisters Springs boardwalk, which will remain open to land access during in-water closures, and the Homosassa Springs Wildlife State Park in Homosassa, Florida.

12) What conditions provide for Three Sisters Springs to be open for in-water visitor access or for a closed to in-water visitor access?

Warm weather typically results in suitable conditions for in-water access for manatee viewing inside Three Sisters Springs without disturbing manatees. During high tides in warm weather, some manatees may visit the interior of the springs, and depending on where they are located will determine a closure or opening of the springs. Even in cold weather events, low tides may provide suitable conditions for inwater visitor access in the springs, particularly during the extreme low tides. However, sustained low water temperatures in the Gulf and high tides in Kings Bay predictably prompt manatees to rest inside the springs for longer periods of time., and Typically the springs undergo a closure during these conditions. Other conditions that prompt closures include poor water visibility in the springs and manatee presence in the springs where the presence of a visitor is likely to disturb those manatees.

13) What exactly constitutes a manatee disturbance as mentioned in Biological Guidelines Flowchart?

A disturbance of a manatee found inside Three Sisters Springs refers to any human activity that is proven to directly result in any of the following:

- Disruption or interruption of a resting manatee (An activity that causes a manatee to stop resting by exhibiting other behaviors that do not reflect resting).
- Causing a manatee to exit the springs (An activity that directly leads to a manatee to exiting the springs).
- Disrupting the nursing of a calf (An activity that interrupts the nursing bond between a calf and a cow).
- Any violation of the twelve Kings Bay manatee prohibitions is considered to be a disturbance of a manatee, even if the action or just the intention from any of the prohibitions doesn't result in an actual disturbance of a manatee. For a full list of the twelve Kings Bay manatee prohibitions, please watch manatee manners found in the Crystal River NWR website at: www.fws.gov/crystalriver