

From: [Jim Valade](#)
To: [Drew Crane](#)
Subject: RE: 316b Cooling Water Intake Structure Rule - Manatee, sea turtle concerns
Date: Wednesday, June 12, 2013 4:28:16 AM
Attachments: [19950501_agr_NPDES MOA w EPA and FDEP SEC 7.pdf](#)

Drew,

Here's a copy of the MOA that was signed when the State of Florida assumed responsibility for addressing the NPDES permitting program. Please let me know if there's anything else. Thanks,

Jim

From: Crane, Drew [mailto:drew_crane@fws.gov]
Sent: Tuesday, June 11, 2013 4:41 PM
To: Jim Valade
Subject: Re: 316b Cooling Water Intake Structure Rule - Manatee, sea turtle concerns

Hi Jim,

Thank you for the response! (b)(5) Deliberative Process

Is there just a general understanding between the state and your office, or did you develop some kind of coordination agreement that everyone adheres to? (b)(5) Deliberative Process

Thanks!

Drew

On Tue, Jun 11, 2013 at 2:36 PM, Jim Valade <jim_valade@fws.gov> wrote:
Drew,

Per your questions:

- Yes, we're aware of facilities in our area that impact and may affect T&E species including manatees and sea turtles.
- Yes, we consulted with EPA on facility NPDES permits prior to State of Florida assumption of permitting responsibilities. We now work with our state colleagues to insure that manatee and other concerns are properly addressed in NPDES permits.

Manatee concerns:

- (b)(5) Deliberative Process

(b)(5) Deliberative Process

See attached spreadsheet identifying facilities that affect manatees.

- Per consultations, we typically require companies to operate such that, during a plants operational lifespan, their operations support and do not endanger on-site wintering manatees. We also require notification of any plant shutdowns, both temporary and permanent, and in the case of temporary shutdowns, proscribe actions necessary to avoid the take of manatees.

- We rarely have direct problems associated with cooling water intake structures and manatees. In rare instances, manatees have become entrained in these structures. When they do, it's generally because intake structure barriers have failed. The majority of entrainment cases are resolved through the rescue of entrained individuals and subsequent repairs to barriers.

Sea turtle concerns:

- We know that sea turtles are entrained in cooling water intake structures. However, the Service is only responsible for issues affecting sea turtles on land, while the National Marine Fisheries Service (NMFS) is responsible for sea turtle in-water issues as they relate to these structures. Therefore, NMFS should be contacted to address potential in-water impacts to sea turtles.

- With regard to potential impacts to sea turtles on nesting beaches, lighting associated with Cooling Water Intake Structures and any associated facilities that are within 5 miles of the beach may affect nesting and hatchling sea turtles. Artificial lighting can be detrimental to sea turtles in several ways. Field observations have shown a correlation between lighted beaches and reduced sea turtle nesting. Adult females rely on visual brightness cues to find their way back to the ocean after nesting; those turtles that nest on lighted beaches may be disoriented by artificial lights and have difficulty finding their way back to the ocean. Under natural conditions, hatchling sea turtles, which typically emerge from nests at night, move toward the brightest, most open horizon, which is over the ocean. However, when bright light sources are visible on the beach, they become the brightest spot on the horizon and attract hatchlings in the wrong direction, making them more vulnerable to predators, desiccation, entrapment in debris or vegetation, and exhaustion, and often luring them onto roadways and parking lots where they are run over. Artificial lights can also disorient hatchlings once they reach the water. Artificial lights that are visible from the beach indirectly by reflecting off buildings or trees as well as the glow from heavily lighted coastal areas can also alter natural hatchling dispersal patterns and cause disorientations. Bright or numerous sources of lights, especially those directed upward, will illuminate sea mist and low

clouds, creating a distinct sky glow visible from the beach. To minimize any potential effects of Cooling Water Intake Structures and any associated facilities within 5 miles of a beach on nesting and hatchling sea turtles, the Service recommends that a 'Light Management Plan' be prepared and implemented using the best available sea turtle 'friendly' lighting technology. Any Light Management Plans should be reviewed and approved by the Service.

We're not aware of other T&E species affected by these structures. (Potentially, sturgeon could become entrained. However, we're not aware of any instances where this has been documented.)

Please let us know if you have any questions or concerns. (For questions specific to manatees, contact Jim Valade at Jim_Valade@fws.gov and for questions specific to sea turtles, contact Ann_Marie_Lauritsen@fws.gov)

Thank you,

Jim Valade (for the North Florida Ecological Services Office)

Jim Valade
Recovery Lead, Florida Manatee

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From: Mizzi, Janet [mailto:janet_mizzi@fws.gov]

Sent: Wednesday, June 05, 2013 4:31 PM

To: Mary Jennings; Bill Pearson; Brad Rieck; Cary Norquist; Chris Davidson; Craig Aubrey; Dan Everson; Dawn Jennings; Deborah Fuller; Donald Imm; Edwin Muniz; Jay Herrington; Jeff Weller; Larry Williams; Laura Rogers; Lee Andrews; Marelisa Rivera; Peggy Shute; Pete Benjamin; Robin Goodloe; Sandy Tucker; Stephen Ricks; Thomas McCoy; Joe Pittman

Cc: Kenneth Graham; Michelle Eversen

Subject: Fwd: 316b Cooling Water Intake Structure Rule - Please respond to HQ by Wednesday, June 12

To all Field Offices in the Southeast Region:

Drew Crane in Headquarters has been working with EPA concerning a potential programmatic consultation for cooling water intake structures (see Drew's note below). At

this point Drew is asking a few general questions to get a feel for how often cooling water intake structures have caused a concern for listed species or designated critical habitats.

If you have any experience or insights on this issue, [please respond directly to Drew Crane in Headquarters by Wednesday, June 12](#). If this has been an issue for us in the past, we need to provide background information to Drew so that he will have a basis to discuss possible programmatic consultation with EPA at a National level.

Thanks for any assistance you can provide to Headquarters on this subject. Due to the short turnaround needed for response, please direct any questions or discussions directly to Drew Crane (see contact information below).

Thanks,
Janet Mizzi
Chief, Endangered Species Branch
Southeast Region

----- Forwarded message -----

From: **Crane, Drew** <drew_crane@fws.gov>

Date: Thu, May 30, 2013 at 6:59 PM

Subject: 316b Cooling Water Intake Structure Rule - Not an official assignment but input appreciated

To: Doug Laye <doug_laye@fws.gov>, Glenn Smith <glenn_s_smith@fws.gov>, Collette Thogerson <collette_thogerson@fws.gov>, Daniel Brown <daniel_brown@fws.gov>, Delfinia Montano <delfinia_montano@fws.gov>, Jana Affonso <jana_affonso@fws.gov>, Jennifer Szymanski <jennifer_szymanski@fws.gov>, Larry Salata <larry_salata@fws.gov>, Sonja Jahrsdoerfer <sonja_jahrsdoerfer@fws.gov>, Kenneth Graham <kenneth_graham@fws.gov>, Patrice Ashfield <patrice_ashfield@fws.gov>

Hi All,

As I mentioned on the call today, EPA will be finalizing a rule that will set standards for existing cooling water intake structures at various facilities that withdraw more than 2 million gallons of water/day (primarily power plants and manufacturing facilities). In the attached map, they have identified where these facilities may occur. They have also determined that these facilities overlap approximately 207 listed species ranges. In most cases, the states are the permitting authority for these facilities. That means in instances where take is occurring, the state or the facility would need to develop an HCP to address any ongoing take issues. This could result in a significant workload increase for some field offices. We are attempting to avoid that situation by addressing this issue through a national programmatic consultation with EPA.

Could each of you poll your respective field offices to see if:

- they know of facilities with cooling water intakes in their area that are impacting T&E species?
- have they completed any consultations or HCPs for facilities that have cooling water intake structures?

- they are aware that this many facilities overlap T&E species in their area?

Even "yes, no" answers would be helpful at this point. Field offices can respond directly to me or you can forward on any responses you receive. If possible, I would appreciate any information they can provide by the end of next week.

Thanks!

Drew Crane
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