

Brunswick Harbor Bar Channel Hopper Dredging FY08

Hopper dredging is conducted by Great Lakes from 1/19/08 to 3/6/08. The work is conducted primarily by the Liberty Island, but the Dodge Island is brought in for a few days while the Liberty Island is down for repairs.

Dredge working:

Liberty Island: 1/19 to 2/26, 2/28 to 2/29

Dodge Island: 3/2 to 3/5

Liberty Island: 3/5 to 3/6

Dredged material was placed in both feeder berm F and the Brunswick ODMDS.

Turtle Takes:

2/23 loggerhead unk age, load #56 Liberty Island

2/26 loggerhead unk age, load #101 Liberty Island

2/26 Kemp's unk age, load #101 Liberty Island

3/6 Kemp's sub ad, load #108 Liberty Island

3/6 loggerhead, unk age, load #108 Liberty Island

In accordance with its pre-dredge risk assessment, the District told the contractor he must begin relocation trawling prior to commencing work. A Kemp's and a loggerhead were relocated on the second day of trawling. Since no other turtles were relocated, the District allowed trawling to cease on 1/27 with the water temperature at 10.7 degrees C.

After two turtles are taken on 2/26 with the water temperature at 14 degrees C, work was stopped while the district reassessed the amount of required work remaining, reviewed SI data and sent data to ERDC for review, and assessed the potential for continued take of sea turtles. No significant operational problems were indicated in the SI data. District determined that risk of sea turtle take could be minimized by reinstating relocation trawling and received concurrence from SAD to continue dredging.

The trawler relocated three Kemp's and two loggerheads during late February through the first few days of March, during which time the Liberty Island went in for repairs and dredging was continued by the Dodge Island. The Liberty Island returned to work on 3/5 and on 3/6 stopped work again after it took a Kemp's and loggerhead in the same load, with the water temperature now at 16.1 degrees C. During the same period, the trawler relocated two Kemp's and a loggerhead.

During continual inspections of the work the District found no evidence of operational problems with the dredge that increased risk of turtle take. The fact that the dredge caught two turtles in the same load while the trawler relocated three additional turtles, was viewed by the District as strong evidence that turtles were moving into the channel. The District determined that the risk of taking additional sea turtles, especially the endangered Kemp's, was too great to continue dredging. On the morning of 3/6 the contractor was told that hopper dredging of the Brunswick channel was over.

Time Line:

12/20/07. District conducts pre-dredge risk assessment and determines that relocation trawling should begin before dredging if the water temperature is above 55 degrees F (12.8 degrees C).

1/11. On about this day the District directs contractor to begin relocation trawling prior to start of hopper dredging because water elevated water temperature.

1/14. Relocation trawler begins, surface water temperature at 14.2 C. (12 hr days after first day).

1/15. Kemp's relocated on tow #32 and loggerhead relocated on tow #37.

1/16. Trawler directed to do 24-hr trawling because two turtles relocated in one day. Water temperature at 13.6 C.

1/19. Liberty Island began work.

1/22. Trawler directed to lower effort to 12-hr trawling because no turtles captured recently.

1/27. Relocation trawling stopped at 1600. Trawler did 279 tows and relocated two sea turtles and 8 Atlantic sturgeon. Water temp at 10.7 C.

2/13. Liberty Island takes loggerhead of unk age in load #56 ending 1206, water temp at 13.3 C.

2/26. Liberty Island takes two sea turtles in load #101 ending 2118, one Kemp's, one loggerhead, ages unk.

2/26. Work stopped after load#101 until relocation trawler can begin again.

2/28. Relocation trawler begins 24-hr trawling at 1013. Water temp 14 C.

2/28. Kemp's relocated on tow #6.

2/28 Liberty Island recommences work at about 2215.

2/29. Two Kemp's relocated on tow #14.

3/1. Loggerhead relocated tow #99.

3/5. Loggerhead relocated tow #137.

3/5. Loggerhead relocated tow #140.

3/6. Kemp's relocated tow #147, water temp 16.3 C.

3/6. Liberty Island takes two turtles, one Kemp's and one loggerhead, in load #108, ending just after midnight.

3/6. Contractor informed just after 0800 that hopper dredging of the Brunswick entrance channel is over.

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Turtle 01: 02/28, tow #06, ridley
Turtle 02: 02/29, tow #14, ridley
Turtle 03: 02/29, tow #14, ridley
Turtle 04: 03/01, tow #57, loggerhead
Turtle 05: 03/03, tow #99, loggerhead
Turtle 06: 03/05, tow #137, ridley
Turtle 07: 03/05, tow #140, loggerhead
Turtle 08: 03/06, tow #147, ridley