

DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 2, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed ten (10) species of bird on the ground within the area affected by the dredge material disposal, and five (5) species of bird flying over the area.

Ground:

- Killdeer
- Least Sandpiper
- Willet
- Semipalmated Plover
- Caspian Tern
- Red-winged Blackbird
- Boat-tailed Grackle
- Laughing Gull
- Herring Gull (immature)
- Great Black-backed Gull (immature)

In Flight:

- Great Cormorant
- Osprey
- Brown Pelican
- Black Vulture
- Snowy Egret

All of the above listed species, with the exception of the Brown Pelican, are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area. **No species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.**

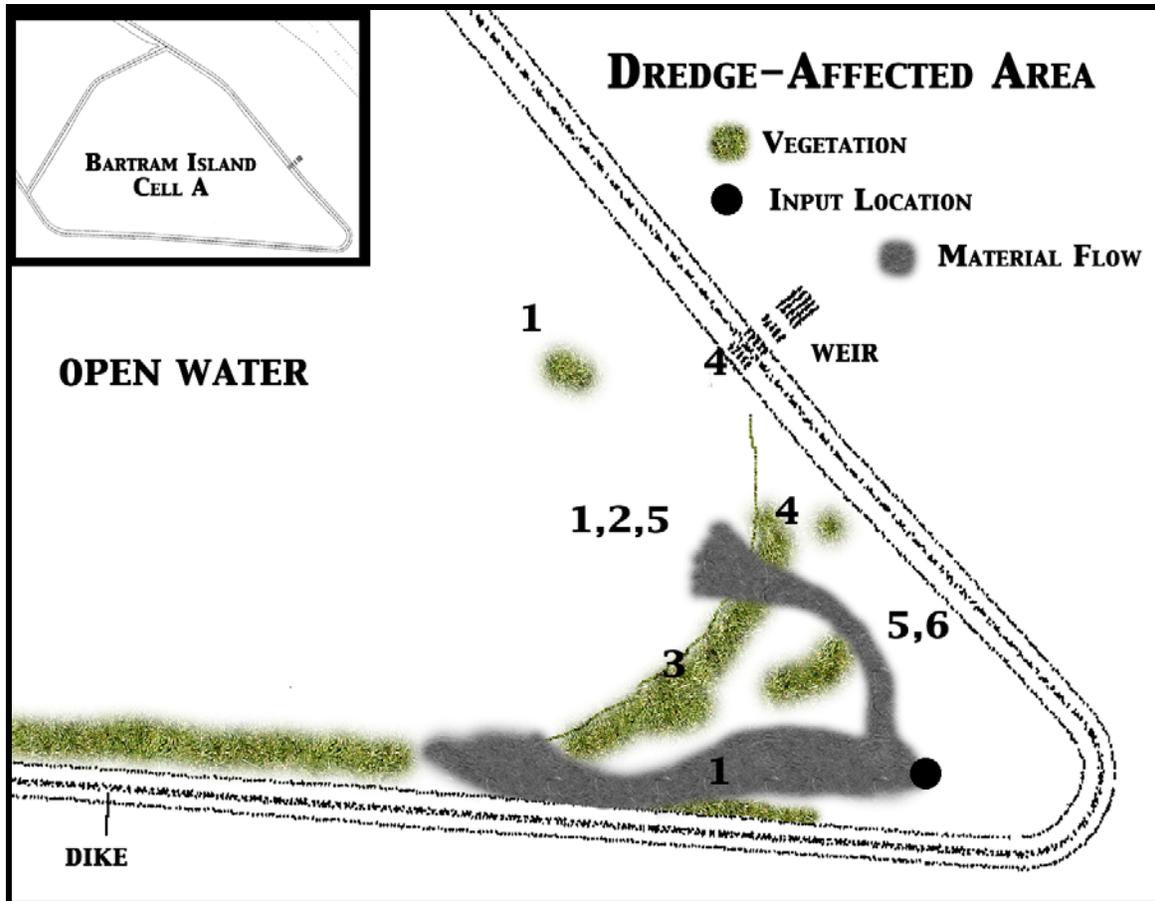
The input location was moved south at 8:30am with the addition of three segments of pipe. The map shows the new flow direction.

Bird Locations:

1. Killdeer, Least Sandpiper, Semipalmated Plover, Willet

2. Caspian Tern
3. Red-winged Blackbird
4. Boat-Tailed Grackle
5. Laughing Gull
6. Great Black-backed Gull

MAP:



DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 3, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed ten (10) species of bird on the ground within the area affected by the dredge material disposal, and four (4) species of bird flying over the area.

Ground:

- Killdeer
- Least Sandpiper
- Willet
- Caspian Tern
- Red-winged Blackbird
- Boat-tailed Grackle
- Laughing Gull
- Ring-billed Gull
- Great Black-backed Gull (immature)
- Song Sparrow

In Flight:

- Double-breasted Cormorant
- American White Pelican
- Tern sp. (Arctic?)
- Great Egret

All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

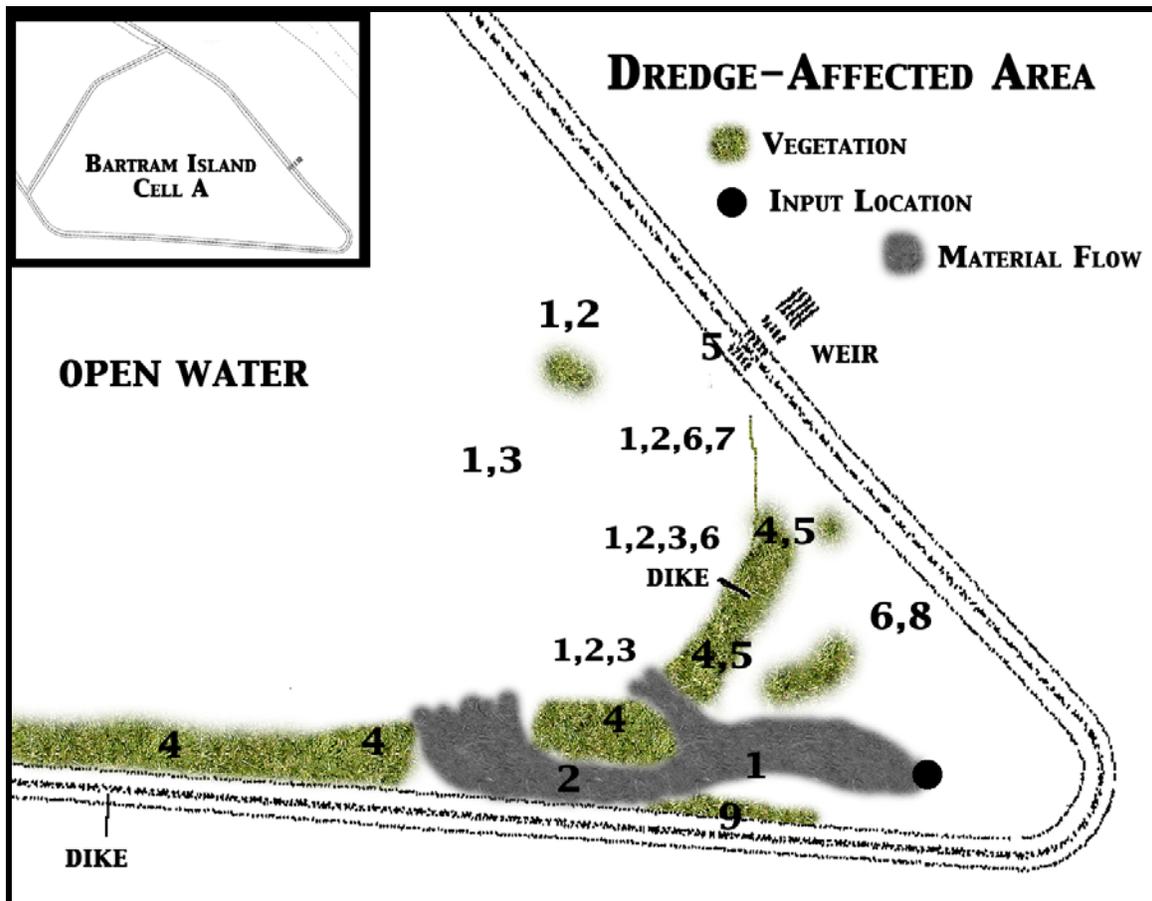
Multiple male Red-winged Blackbirds were making territorial and mating displays in the tall bushes on and around the central dike. This is ideal habitat for this species. It is highly likely they will build nests on and around the central dike. This should not affect the dredge material disposal as the dike is well established and will not wash away. The nests and birds will remain undisturbed as the central dike is surrounded by mudflats and is not accessible to humans. Boat-tailed Grackles will also likely nest in the same area, but have not been showing territorial or mating displays yet.

No species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

Bird Locations:

1. Least Sandpiper, Willet
2. Killdeer
3. Caspian Tern
4. Red-winged Blackbird
5. Boat-Tailed Grackle
6. Laughing Gull
7. Ring-billed Gull
8. Great Black-backed Gull (immature)
9. Song Sparrow

MAP:



DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 4, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed sixteen (16) species of bird on the ground within the area affected by the dredge material disposal, and three (3) species of bird flying over the area.

Ground:

- Killdeer
- Semipalmated Sandpiper
- Least Sandpiper
- Willet
- Caspian Tern
- Royal Tern
- Herring Gull (immature)
- Laughing Gull
- Red-winged Blackbird
- Boat-tailed Grackle
- American Crow
- Osprey
- Great Egret
- Great Blue Heron
- Lesser Yellowlegs
- Song Sparrow

In Flight:

- Double-breasted Cormorant
- Great Cormorant
- Brown Pelican

All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

I observed a pair of Killdeer mating on the crest of the north dike this morning. They prefer open gravelly terrain for nesting. It is very likely they will nest on the crest of the

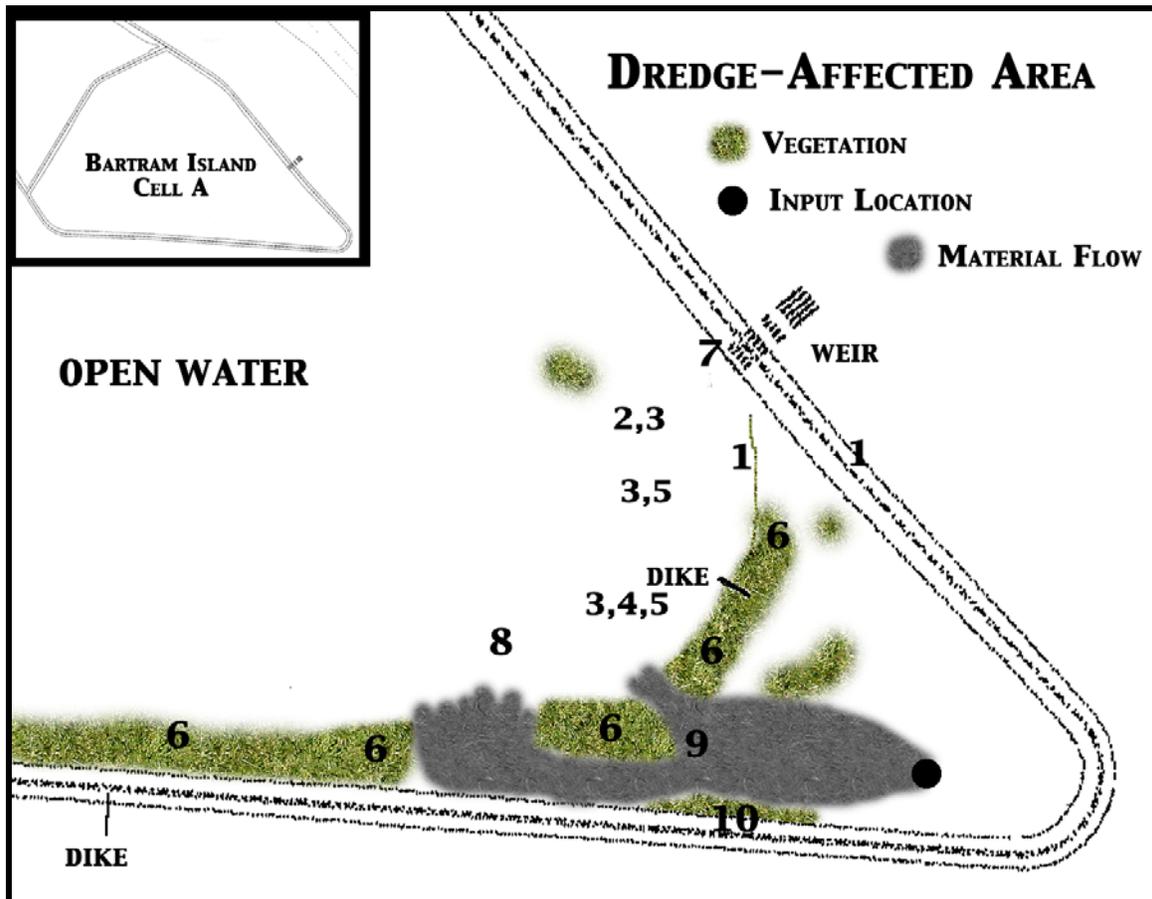
dike very soon. As soon as the nest is located, I will mark it off and instruct the beach crew to stay away from the area.

No species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

Bird Locations:

1. Killdeer
2. Semipalmated Sandpiper
3. Least Sandpiper, Willet
4. Caspian Tern, Royal Tern, Herring Gull (immature)
5. Laughing Gull
6. Red-winged Blackbird
7. Boat-Tailed Grackle, American Crow, Osprey, Great Egret
8. Great Blue Heron
9. Lesser Yellowlegs
10. Song Sparrow

MAP:



DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 5, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed twenty-two (22) species of bird on the ground within the area affected by the dredge material disposal, and six (6) species of bird flying over the area.

Ground:

- Killdeer
- Semipalmated Sandpiper
- Greater Yellowlegs
- Lesser Yellowlegs
- Willet
- Least Sandpiper
- Caspian Tern
- Royal Tern
- Least Tern
- Black-necked Stilt
- American Avocet
- Laughing Gull
- Herring Gull
- Red-winged Blackbird
- Boat-tailed Grackle
- Snowy Egret
- Great Egret

- Great Blue Heron
- Mourning Dove
- Song Sparrow
- White Pelican
- Double-crested Cormorant

In Flight:

- American Crow
- Brown Pelican
- Osprey
- Tricolor Heron
- Unknown duck species
- Unknown swallow species

All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

No species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 6, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed twenty-one (21) species of bird on the ground within the area affected by the dredge material disposal, and five (5) species of bird flying over the area.

Ground:

- Least Sandpiper
- Lesser Yellowlegs
- Greater Yellowlegs
- Semipalmated Sandpiper
- Ruddy Turnstone
- Herring Gull
- Snowy Egret
- Caspian Tern
- Little Blue Heron
- Black Skimmer
- American Avocet
- Great Blue Heron
- Great Egret
- Laughing Gull

- Red-winged Blackbird
- Boat-tailed Grackle
- Killdeer
- Black-necked Stilt
- Mourning Dove
- Song Sparrow
- American Black Duck

In Flight:

- American Crow
- Double-crested Cormorant
- Osprey
- Gull-billed Tern
- Unknown swallow species

All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

I mentioned in my report on April 3rd that the Boat-tailed Grackles should begin nesting on the central dike. This morning I observed a pair behaving as if they have a nest in the vegetation in that location. Due to the surrounding mudflats, I am unable to get to the dike to confirm whether or not there is a nest but I am very confident there is at least one. I am not concerned for the safety of the nest as I previously mentioned that the dike is

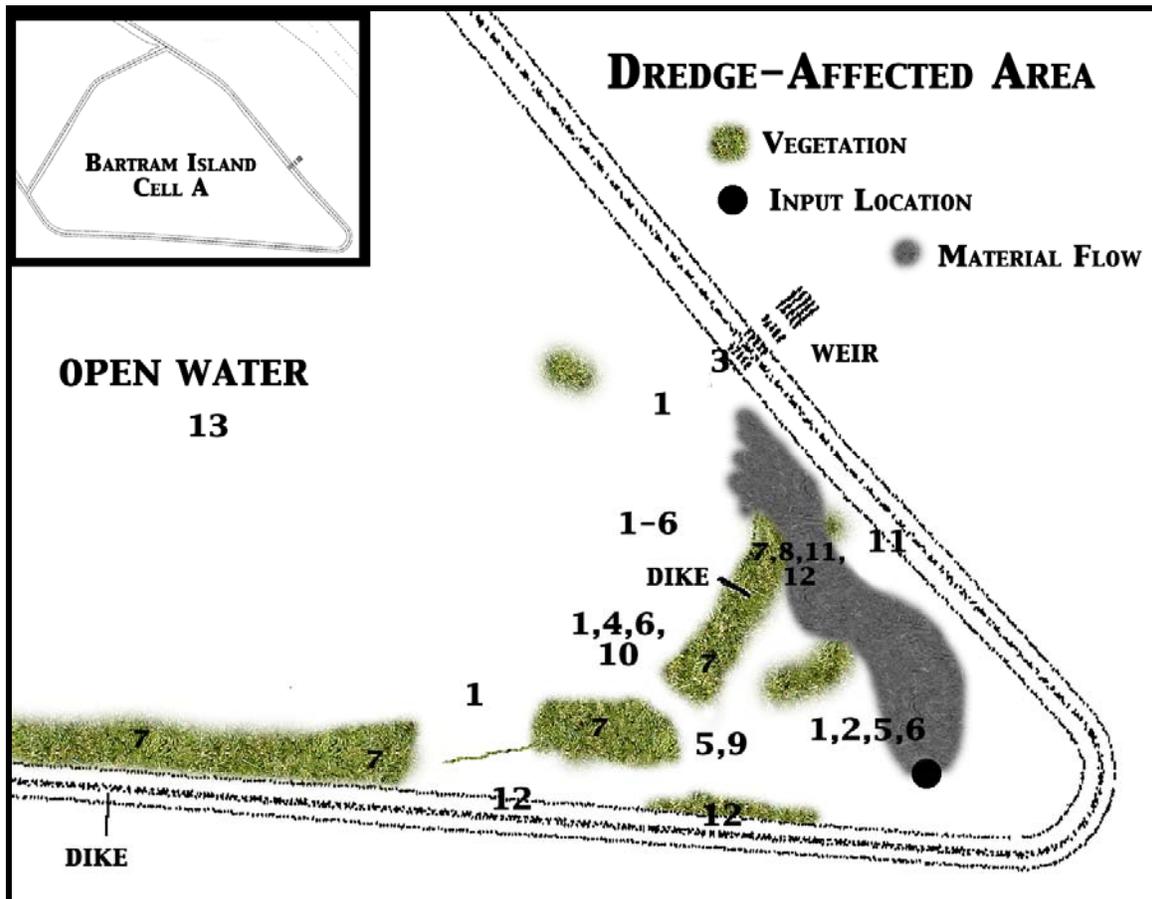
well established and will not wash away and is safe from human interaction as the mud prevents any access.

No other species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

Bird Locations:

- | | |
|---------------------------|-------------------------|
| 1. Least Sandpiper | Great Blue Heron |
| Lesser Yellowlegs | 5. Great Egret |
| Greater Yellowlegs | 6. Laughing Gull |
| 2. Semipalmated Sandpiper | 7. Red-winged Blackbird |
| Ruddy Turnstone | 8. Boat-tailed Grackle |
| Herring Gull | 9. Killdeer |
| 3. Snowy Egret | 10. Black-necked Stilt |
| Caspian Tern | 11. Mourning Dove |
| Little Blue Heron | 12. Song Sparrow |
| Black Skimmer | 13. American Black Duck |
| 4. American Avocet | |

MAP:



DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 7, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed eighteen (18) species of bird on the ground within the area affected by the dredge material disposal, and seven (7) species of bird flying over the area.

Ground:

- Least Sandpiper
- Lesser Yellowlegs
- Greater Yellowlegs
- Willet
- Semipalmated Plover
- Semipalmated Sandpiper
- Ruddy Turnstone
- Herring Gull
- Snowy Egret
- Black Skimmer
- American Avocet
- Great Blue Heron
- Ring-billed Gull

- Laughing Gull
- Red-winged Blackbird
- Royal Tern
- Song Sparrow
- American Crow

In Flight:

- Great Egret
- Double-crested Cormorant
- Osprey
- Brown Pelican
- Black-legged Stilt
- Common Loon
- Black Vulture

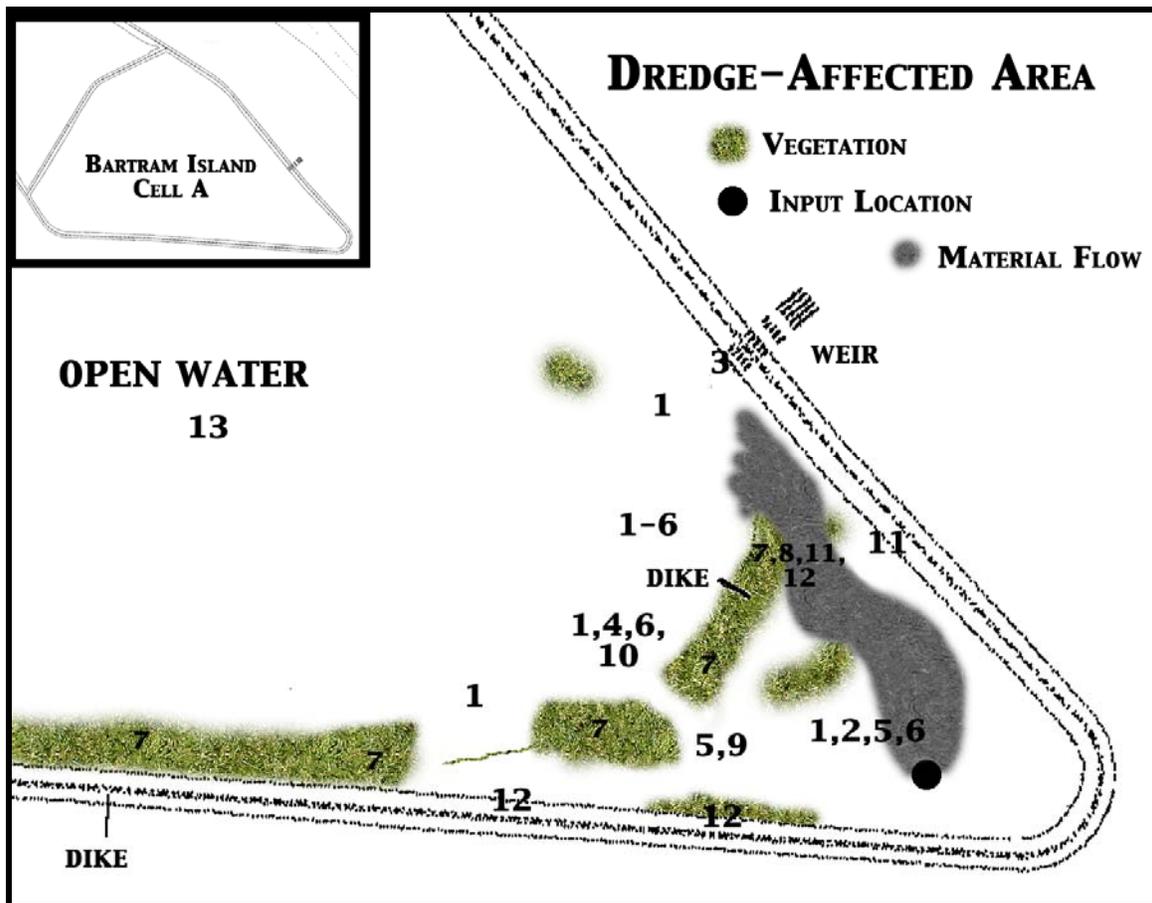
All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

No species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

Bird Locations:

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Willet
Lesser Yellowlegs
Greater Yellowlegs 2. Semipalmated Sandpiper
Least Sandpiper 3. Laughing Gull
Ring-billed Gull
Herring Gull
Ruddy Turnstone | <ol style="list-style-type: none"> 4. Black Skimmer
Royal Tern
Semipalmated Plover 5. American Crow
Snowy Egret 6. Song Sparrow 7. American Avocet 8. Red-winged Blackbird 9. Great Blue Heron |
|---|--|

MAP:



DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 8, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed twenty one (21) species of bird on the ground within the area affected by the dredge material disposal, and six (6) species of bird flying over the area.

Ground:

- Least Sandpiper
- Lesser Yellowlegs
- Greater Yellowlegs
- Willet
- Semipalmated Sandpiper
- Ruddy Turnstone
- Herring Gull
- Great Egret
- Snowy Egret
- Black Skimmer
- American Avocet
- Great Blue Heron
- Ring-billed Gull
- Laughing Gull

- Great Black-backed Gull
- Red-winged Blackbird
- Royal Tern
- Song Sparrow
- American Crow
- American Black Duck
- Black-necked Stilt

In Flight:

- Brown Booby
- Double-crested Cormorant
- Osprey
- Brown Pelican
- Caspian Tern
- Black Vulture

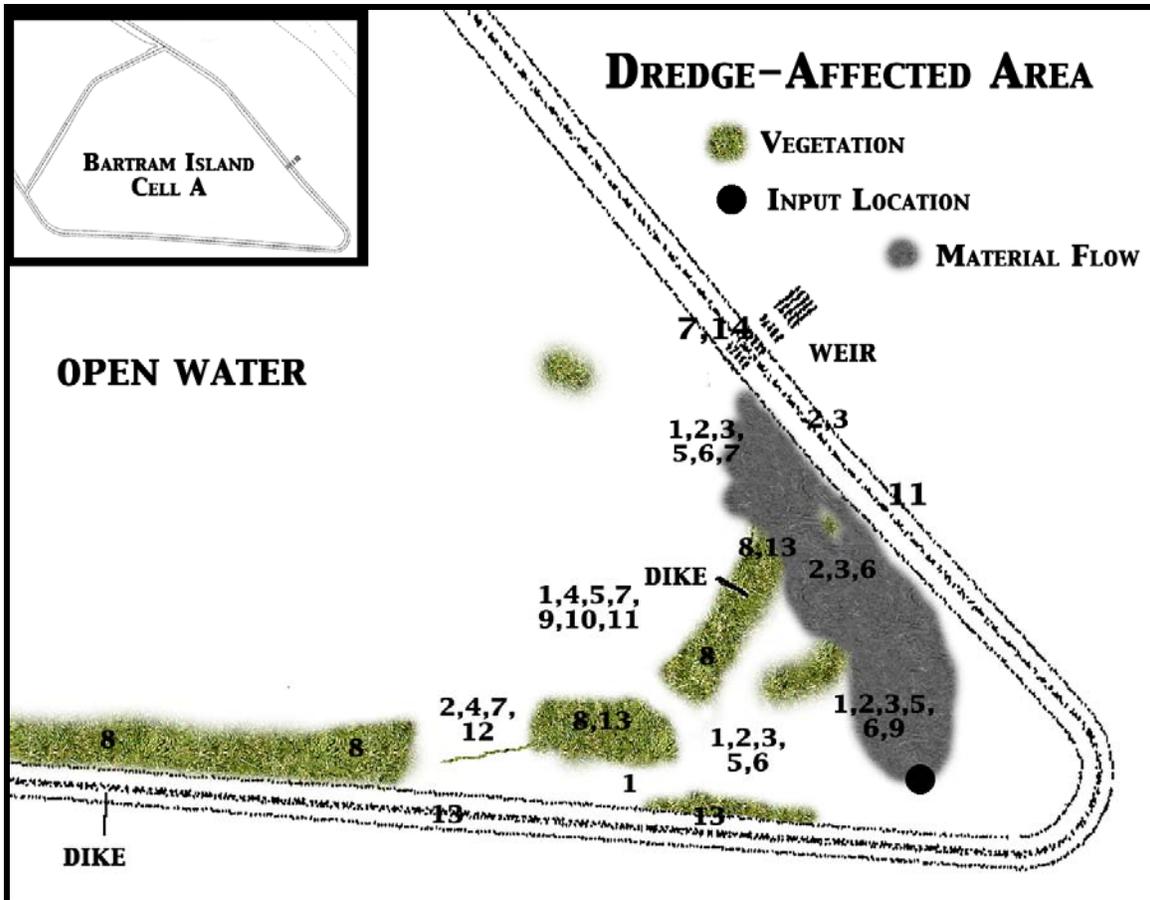
All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

No species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

Bird Locations:

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Semipalmated Sandpiper
Least Sandpiper 2. Laughing Gull 3. Great Black-backed Gull
Ring-billed Gull
Herring Gull 4. Willet
Lesser Yellowlegs
Greater Yellowlegs
American Avocet 5. Great Blue Heron | <ol style="list-style-type: none"> 6. Great Egret 7. Snowy Egret 8. Red-winged Blackbird 9. Ruddy Turnstone 10. Black Skimmer
Royal Tern 11. American Black Duck 12. Black-necked Stilt 13. Song Sparrow 14. American Crow |
|--|---|

MAP:



DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 9, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed twenty two (22) species of bird on the ground within the area affected by the dredge material disposal, and five (5) species of bird flying over the area.

Ground:

- Least Sandpiper
- Lesser Yellowlegs
- Greater Yellowlegs
- Willet
- Semipalmated Sandpiper
- Ruddy Turnstone
- Great Egret
- Snowy Egret
- Black Skimmer
- American Avocet
- Great Blue Heron
- Ring-billed Gull
- Laughing Gull
- Great Black-backed Gull

- Red-winged Blackbird
- Song Sparrow
- American Crow
- American Black Duck
- Black-necked Stilt
- White Pelican
- Boat-tailed Grackle
- Caspian Tern

In Flight:

- Bald Eagle
- Double-crested Cormorant
- Osprey
- Brown Pelican
- Black Vulture

All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

Two species previously abundant and active have seemingly disappeared in the last few days. Killdeer and Boat-tailed Grackle were very prevalent in the first week of observations. I have not seen a Killdeer in three days. The last one I saw was a single individual on April 6th. I do not know if this absence is because the birds have moved

to other areas or if they are sitting on nests. However, I have not encountered any nests in the areas I patrol, farther than any of the dredge crew go on a daily basis.

The Boat-tailed Grackle are nesting on the central dike. The rare sightings I have are of a male always flying from the same point. I also briefly saw a female at that location before she returned to cover. I mentioned this spot in the April 6th report.

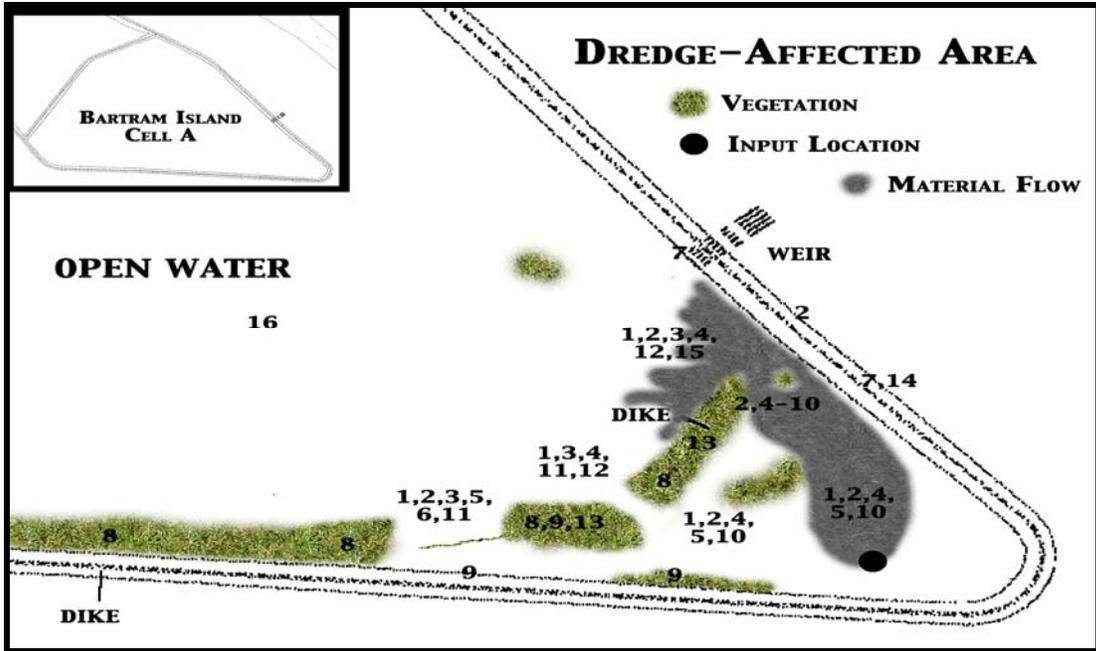
I observed a group of three male Black-necked Stilts competing over a female in the late morning. If the female nests in the dredge-affected area, it will likely be on one of the dikes. However, I am not concerned with dredge and clean-up operations being a disturbance. As mating has not yet occurred, it is unlikely she will have a nest prepared or eggs laid within the next three days.

No other species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

Bird Locations:

- | | |
|---------------------------|-------------------------|
| 1. Semipalmated Sandpiper | 7. American Crow |
| Least Sandpiper | 8. Red-winged Blackbird |
| 2. Laughing Gull | 9. Song Sparrow |
| Great Black-backed Gull | 10. Ruddy Turnstone |
| Ring-billed Gull | 11. Black-necked Stilt |
| 3. Willet | 12. Black Skimmer |
| Lesser Yellowlegs | American Avocet |
| Greater Yellowlegs | 13. Boat-tailed Grackle |
| 4. Great Blue Heron | 14. American Black Duck |
| 5. Great Egret | 15. Caspian Tern |
| 6. Snowy Egret | 16. White Pelican |

MAP:



DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 10, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed twenty three (23) species of bird on the ground within the area affected by the dredge material disposal, and three (3) species of bird flying over the area.

Ground:

- Least Sandpiper
- Lesser Yellowlegs
- Greater Yellowlegs
- Willet
- Semipalmated Sandpiper
- Semipalmated Plover
- Solitary Sandpiper
- Killdeer
- Ruddy Turnstone
- Great Egret
- Black Skimmer
- American Avocet
- Great Blue Heron
- Ring-billed Gull

- Laughing Gull
- Herring Gull
- Great Black-backed Gull
- Red-winged Blackbird
- Song Sparrow
- Barn Swallow
- American Crow
- Boat-tailed Grackle
- Caspian Tern

In Flight:

- Double-crested Cormorant
- Osprey
- Gull-billed Tern

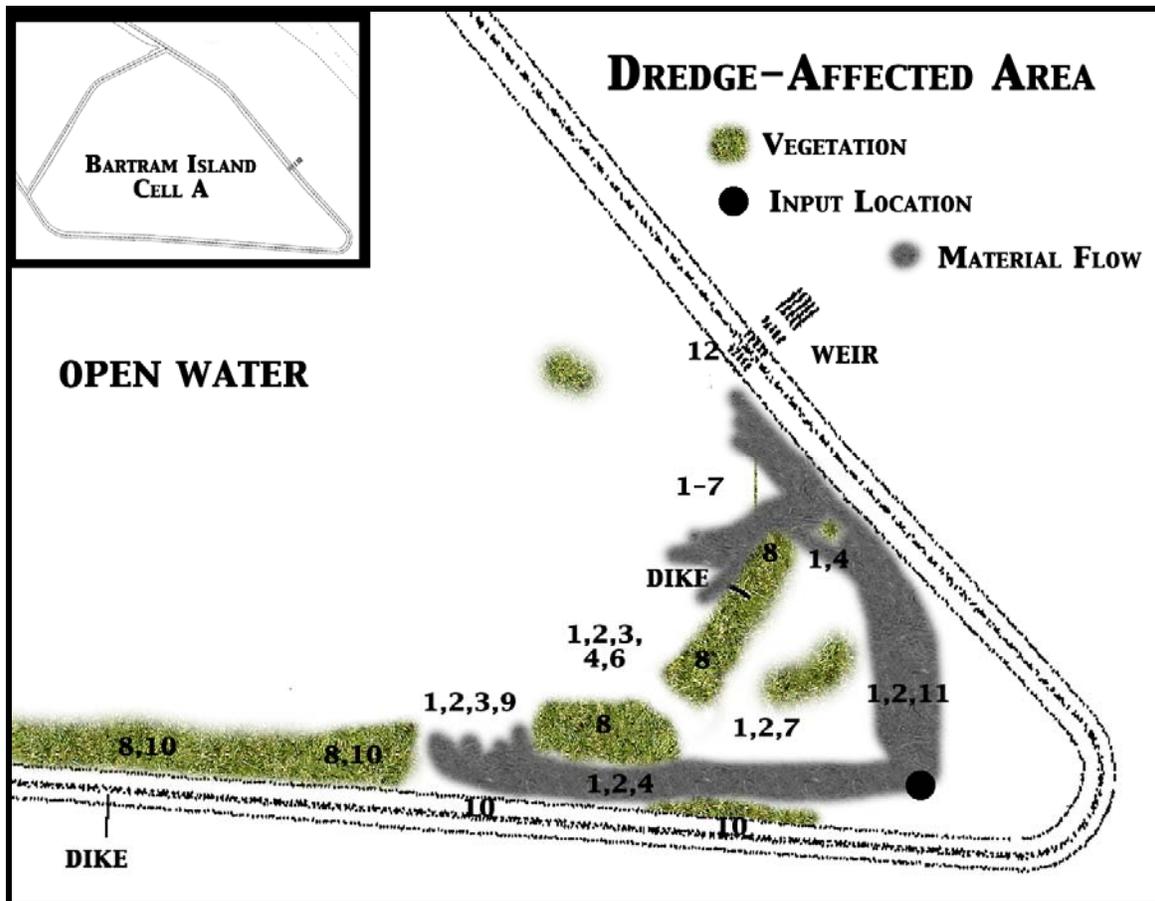
All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

No species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

Bird Locations:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Semipalmated Sandpiper Laughing Gull Herring Gull Great Black-backed Gull Ring-billed Gull Great Egret 2. Great Blue Heron Least Sandpiper 3. Lesser Yellowlegs Greater Yellowlegs 4. Willet 5. Black Skimmer 6. American Avocet | <ol style="list-style-type: none"> 7. Semipalmated Plover 8. Red-winged Blackbird 9. Boat-tailed Grackle Solitary Sandpiper Killdeer 10. Barn Swallow Song Sparrow 11. Ruddy Turnstone Caspian Tern 12. Black Skimmer American Avocet 13. American Crow |
|---|---|

MAP:



DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 11, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed seventeen (17) species of bird on the ground within the area affected by the dredge material disposal, and one (1) species of bird flying over the area.

Ground:

- Least Sandpiper
- Lesser Yellowlegs
- Greater Yellowlegs
- Semipalmated Sandpiper
- Ruddy Turnstone
- Great Egret
- Snowy Egret
- American Avocet
- Great Blue Heron
- Ring-billed Gull

- Laughing Gull
- Great Black-backed Gull
- Red-winged Blackbird
- Song Sparrow
- American Crow
- American Black Duck
- Mourning Dove

In Flight:

- Brown Pelican

All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

There was very thick fog (~1/10 mile visibility) covering the disposal site and surrounding area this morning, making bird watching very difficult. I have shown what areas I was able to see. Some birds were located by their calls, and I have noted those with an asterisk. There are a few species which have been regulars every day but do not appear on the list today, such as the Black Skimmer. They were very likely present, but as they remain out in the farther areas and do not call, I could not confirm their presence.

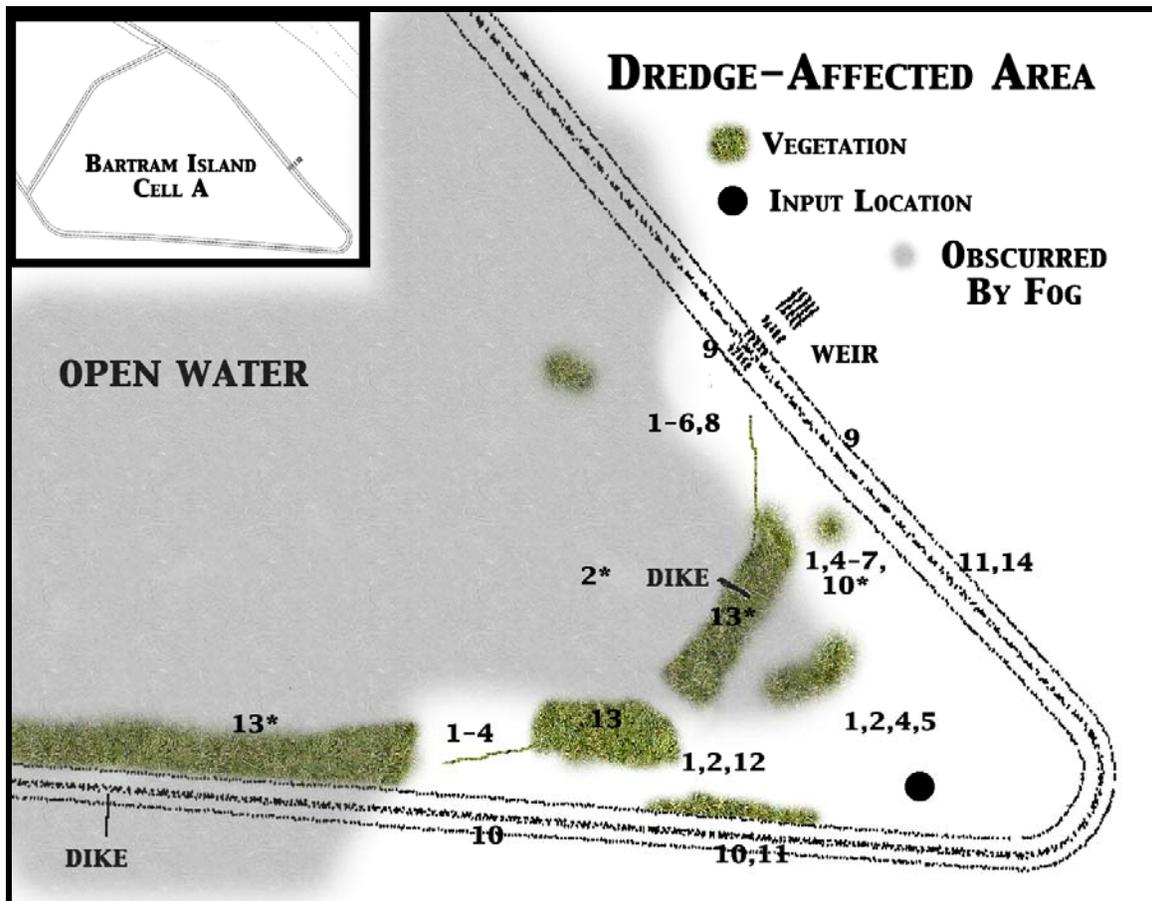
No species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

Bird Locations:

- | | |
|----------------------------|--------------------------|
| 1. Semipalmated Sandpiper | 8. Great Blue Heron |
| 2. Least Sandpiper | American Avocet |
| 3. Lesser Yellowlegs | 9. American Crow |
| Greater Yellowlegs | 10. Song Sparrow |
| 4. Laughing Gull | 11. Mourning Dove |
| 5. Great Black-backed Gull | 12. Ruddy Turnstone |
| Ring-billed Gull | 13. Red-winged Blackbird |
| 6. Great Egret | 14. American Black Duck |
| 7. Snowy Egret | |

There were no material offloads today.

MAP:



DAILY BIRD MONITORING REPORT

Project: 122188 - Jax Harbor Main't. Dredging 40-42
Contract Number: W912EP-07-C-0015, Reference Number R00005
Contractor: Norfolk Dredging Co.
Sub. Contractor: Weeks Marine Inc.
Dredge: R.N. Weeks

Date: April 13, 2008
Monitor: Carla Geyer

MORNING SITE VISIT (Before 9am):

Were birds present? YES

I observed nineteen (19) species of bird on the ground within the area affected by the dredge material disposal, and six (6) species of bird flying over the area.

Ground:

- Least Sandpiper
- Lesser Yellowlegs
- Greater Yellowlegs
- Semipalmated Sandpiper
- Ruddy Turnstone
- Black-necked Stilt
- Snowy Egret
- American Avocet
- Great Blue Heron
- Ring-billed Gull
- Laughing Gull
- Great Black-backed Gull
- Red-winged Blackbird

- Song Sparrow
- Black Skimmer
- Willet
- Barn Swallow
- American Black Duck
- Mourning Dove

In Flight:

- Brown Pelican
- Least Tern
- Osprey
- Double-crested Cormorant
- Great Egret
- American Crow

This is the last Daily Bird Report for this project. The area of concern has been cleared of equipment and personnel. There will be one more report submitted, a final summation, and then the Bird Monitoring of the project is complete.

All of the above listed species are protected by the Migratory Bird Treaty Act. All birds on the ground were feeding, sleeping, preening, and moving about. The birds seen in flight never landed in or near the disposal area.

There were no material offloads today. The crew was removing the pipe and leveling the dump site. At no point during cleanup did any crew on foot or in the bulldozer get near

the central dike, the only area I am concerned that has nesting birds. The work was done quickly and with minimal disturbance to the area.

No species exhibited any nesting behavior in or near the disposal site. No nests were found in or near the disposal area.

Bird Locations:

- | | |
|-------------------------|---------------------------|
| 1. Least Sandpiper | 4. Semipalmated Sandpiper |
| Laughing Gull | Black-necked Stilt |
| Great Black-backed Gull | 5. Barn Swallow |
| Ring-billed Gull | Song Sparrow |
| 2. Lesser Yellowlegs | 6. Willet |
| Greater Yellowlegs | 7. Red-winged Blackbird |
| 3. American Avocet | 8. Snowy Egret |
| Black Skimmer | 9. Mourning Dove |
| Ruddy Turnstone | 10. American Black Duck |
| Great Blue Heron | |

MAP:

