

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF NORTH CAROLINA  
NORTHERN DIVISION

No. 2:07-CV-45-BO

DEFENDERS OF WILDLIFE, <u>et al.</u> ,	)	DECLARATION OF
	)	MICHAEL B. MURRAY
Plaintiffs,	)	
	)	
v.	)	
	)	
NATIONAL PARK SERVICE, <u>et al.</u> ,	)	
	)	
Defendants,	)	
	)	
and	)	
	)	
DARE COUNTY, <u>et al.</u> ,	)	
	)	
Intervenor-Defendants.	)	

Pursuant to 28 U.S.C. § 1746, I, Michael B. Murray,  
declare and state as follows:

1. My name is Michael B. Murray. I reside in Nags Head, North Carolina. I have worked for the National Park Service ("NPS") since June 1978 and have served as the Superintendent of the Outer Banks Group (Cape Hatteras National Seashore, Fort Raleigh National Historic Site, and Wright Brothers National Memorial) since December 2005.

2. My educational background and training includes the following: B.A. in Biology, Graduated with Distinction, University of Virginia, 1976. Federal Law Enforcement Training Center, Most Distinguished Graduate, FLETC class 9PT-208, 1982.

Natural Resources/Environmental Compliance training - 916 hours including college course work. NPS law enforcement training - over 1200 hours since 1979.

3. My work experience includes: 29 years with NPS in a variety of positions, including over 10 years (1997 to present) experience in park management as a Deputy Superintendent or Superintendent at national seashores.

4. I worked 18 years as a commissioned NPS law enforcement ("LE") ranger (1979-1997), including over 12 years as a LE supervisor. I served as a district ranger at New River Gorge National River (1987-1988) and at Sequoia-King Canyon National Park (1989-1992). I then served as Assistant Chief Ranger for Operations at Yellowstone National Park (1992-1997) where I supervised a force of 90 commissioned LE rangers.

5. I served as Deputy Superintendent at Cape Cod National Seashore for eight years (1997-2005), including 9 months as Acting Superintendent. In my role as Deputy Superintendent, I managed all park operations including law enforcement and resources management. Accomplishments include the implementation of an off-road vehicle ("ORV") regulation that had been revised using the negotiated rulemaking process prior to my arrival. Under my direction, we continued to improve the ORV management program at Cape Cod, which included working closely with the ORV Sub-Committee of the Cape Cod National

Seashore Advisory Commission; expansion of the natural resources management program to develop a comprehensive ecological inventory and monitoring program; and creation of a pilot "science learning center" at Cape Cod to enhance the level of, and improve the coordination of, scientific research in the park. At Cape Cod I observed that the popularity of sport utility vehicles put increased pressure on park resources and park staff to manage ORV use in an area that had originally developed its ORV management plan and regulation in the 1980's.

6. I started my assignment as Superintendent of Cape Hatteras National Seashore ("CAHA" or "Seashore") in December 2005. As Superintendent of the Outer Banks Group, I am responsible for, among many things, the management planning and management actions at CAHA, including those involving ORV use. Shortly after entering on duty, I conducted the final internal review of the Interim Protected Species Management Strategy ("Interim Strategy") and issued it for public review. I have been responsible for getting the long-term ORV management plan started and for getting the negotiated rulemaking ("Reg. Neg.") advisory committee established and its members appointed. I serve as the Designated Federal Officer ("DFO") for the Reg. Neg. and have presided over the first three meetings of the committee.

Since December 2005, I have participated in numerous meetings with the public, stakeholders, Reg. Neg. members, and NPS and Department of the Interior ("DOI") officials regarding ORV use at the Seashore and our obligations under 36 C.F.R. § 4.10. Throughout the litigation of this case, I have participated in numerous meetings and discussions with counsel and provided assistance in the crafting of the proposed Consent Decree.

My intent in providing this declaration is to give a brief overview of the Interim Strategy and the key modifications of the Interim Strategy as proposed in the Consent Decree and to explain the 2008 Prenesting Closure Area Maps as implemented under the Interim Strategy and how these maps relate to the proposed Consent Decree.

**The Interim Strategy (Status Quo)**

7. The Interim Strategy is an adaptive management plan that was developed in response to environmental organizations requests for ORV rulemaking at CAHA and as part of NPS's three-pronged approach<sup>1</sup> to address its obligations under Executive

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<sup>1</sup>NPS first developed the Interim Strategy to provide guidance for protection of sensitive species, to provide for Section 7 consultation under the Endangered Species Act ("ESA"), and to provide for management of recreational use until a long-term ORV management plan/NEPA analysis and regulation could be completed. NPS then began development of a long-term ORV management plan/NEPA analysis. Thirdly, NPS initiated the negotiated rulemaking process to develop the ORV regulation. Under the

Order 11644 and 36 C.F.R. § 4.10. As the Court may be aware, the Interim Strategy prescribes resource monitoring and resource protection measures (e.g., closures based on buffer distances) that are implemented or modified in response to actual observed conditions on the ground. The Interim Strategy includes biological monitoring and management actions to protect breeding piping plovers, American oystercatchers, and colonial waterbirds during the pre-nesting, courtship and mating, nesting, and unfledged chick stages of the breeding cycle. CAHA staff also survey for wintering piping plover, American oystercatcher, red knot and Wilson's plover at key locations; survey beaches daily from May 1-September 15 to locate and protect sea turtle nests; and survey for and protect seabeach amaranth, a threatened plant.

8. Under the Interim Strategy, Winter Closures for resources protection occur each year from approximately September 15 to late March to close suitable interior habitats at Bodie Island Spit, Cape Point, Hatteras Spit, and South Ocracoke to all recreational use to provide undisturbed roosting and foraging habitat for migrating and wintering shorebirds. Such suitable habitats include ephemeral pools, moist flats and sound shoreline at Bodie Island Spit Cape Point, Hatteras Spit,

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proposed Consent Decree, the final Special Regulation must be promulgated by April 1, 2011.

and South Ocracoke. Actual locations of suitable foraging and resting habitat may change periodically due to natural processes. When these Winter Closures are in effect, ORV and pedestrian access to the respective spits and Cape Point is generally allowed along a marked designated corridor up to 150 feet wide. By comparison to the breeding season closures described in the next sections, the Winter Closures are relatively small with very limited impact on ORV access.

9. Under the Interim Strategy, in February or March of each year, NPS Resources Management staff conducts an annual assessment of piping plover breeding habitat to plan and recommend Prenesting Closure Areas to be established in piping plover breeding areas. The purpose of the Prenesting Closure Areas is to provide undisturbed suitable breeding habitat for piping plovers prior to their arrival, so that upon their arrival they have an opportunity to establish territories and begin the breeding cycle. These areas are considered to have the highest probability of piping plover nesting and typically include contiguous nesting and foraging habitat.

10. Under the Interim Strategy, NPS establishes the Prenesting Closure Areas prior to April 1 each year by closing recent piping plover breeding habitats at the spits and Cape Point using "symbolic fencing" composed of wooden posts with explanatory signs and string connecting the posts to create a

visible symbolic barrier to entry. In these areas, in addition to the symbolic fencing, NPS also may use carsonite markers to post a 100-foot-wide access corridor, where possible, to provide ORV and pedestrian access along the shoreline past the closures.

11. The Prenesting Closure Areas serve, in essence, as the initial baseline resource closures at the key nesting sites (the spits and Cape Point) as the breeding season begins. Under the Interim Strategy, the Prenesting Closure Areas may be removed after July 15 or when the area has been abandoned by breeding birds for a 2-week period, whichever comes later. What typically happens is that multiple species of protected birds use the Prenesting Closure Areas, and some form of Resource Closure (see next paragraph) will remain in effect at these sites until at least mid-to-late August.

12. As the breeding season progresses, NPS Resources Management staff monitor for breeding activity and implement additional closures for piping plovers, American oystercatchers and colonial waterbirds at the spits and Cape Point and at other locations throughout the Seashore. When bird breeding activity, such as establishment of territories, courtship/mating, nesting, or chick rearing is observed, NPS will implement Resource Closures, following the buffer distance guidance in the Interim Strategy, as needed to protect breeding, nesting, and foraging birds; and to protect chicks until they fledge. When a Resource

Closure is required, NPS considers finding an alternate ORV route or bypass around the closure, when feasible. In areas of reduced corridor width (i.e., narrower than 100 feet) NPS may post a 10 mph speed limit.

These Resource Closures are left in place until after chicks have fledged, the site has been abandoned for a two week period, or the nest has been lost, such as due to a storm event or predation. If a nest of any species is lost, the respective closure is left in place an additional 2-3 weeks to determine if the pair will renest.

13. Under the Interim Strategy, NPS Resources Management staff patrol potential sea turtle nesting habitat daily from May 1-September 15 to search for nests and when nests are found to establish closures based on buffers identified in the Interim Strategy. After 50-55 days, when eggs are predicted to hatch, NPS expands the size of the buffer and installs light filter fencing around the nest. Nests are monitored daily until the eggs hatch, or if hatching does not occur, NPS excavates the nest after a prescribed number of days to determine the status of the eggs.

14. Under the Interim Strategy, NPS Resources Management staff conduct an annual survey for seabeach amaranth plants in August each year, establish resource closures around plants based on buffer distance guidance, and survey for the plants in



other kinds of Resources Closures (e.g., for birds) prior to reopening the area to ORV use.

15. Considering the level of monitoring and variety of protective measures (such as Prenesting Closure Areas and additional buffers based on observed bird behavior), the Interim Strategy is labor intensive to implement and requires a considerable amount of staffing as well as internal coordination. Each year since 2006 CAHA has received approximately \$280,000 - \$300,000 in annual project funds to hire 14-17 temporary Biological Technicians to implement the monitoring and resource protection measures identified in the Interim Strategy. When I entered on duty in December 2005, CAHA had 13 occupied LE ranger positions. Since then CAHA has generally maintained 17 funded LE ranger positions, and occasionally brought in additional LE ranger staff from other parks on short duration assignments, such as during holiday weekends, to supplement the CAHA LE ranger staff.

16. As an example of the Resources Management workload related to the Interim Strategy, during the 2006 breeding season (April 1-November 15, 2006) NPS implemented 331 management actions involving the installation, modification and removal of Resource Closures associated with protected species. These actions included 97 bird closures, closure modifications (expansions or reductions), and removals; and 84 sea turtle nest

closures, 75 modifications in preparation for hatching, and 75 closure removals. In 2007 the Resources Management staff implemented a total of 389 management actions involving the installation, modification and removal of Resource Closures associated with protected species.

17. Under the Interim Strategy, the number of Resource Closures in effect and the total amount of area(s) closed at any one time typically increases as the breeding season progresses, and peaks when unfledged chicks, which require the largest buffer, of multiple species are on the ground at multiple sites, which is usually in mid-to-late July until early-to-mid August. As chicks fledge, the closures are sequentially removed and beaches begin to reopen to visitor use, usually in late July until mid-to-late August.

For example, in mid-August 2007 of 63 miles of Seashore beaches, there were approximately 27.8 miles (44.1%) beach closed to ORVs; pedestrians were permitted within these closures. The ORV closures included seasonal ORV closures in front of the villages and lifeguarded beaches, and ORV safety closures in sections of narrow beach that were deemed by NPS to be unsafe for ORV use. Approximately 9.8 miles (15.6%) were closed to both ORVs and pedestrians due to temporary Resource Closures. During this time period, there were approximately 25.4 (40.3%) miles open to both ORVs and pedestrians and a total

of 53.4 miles (84%) of the Seashore's beaches open to pedestrians.

**Impacts of the proposed Consent Decree**

18. Under the proposed Consent Decree, NPS will continue to implement the Interim Strategy, plus a number of modifications as stated in the proposed Consent Decree.

19. Under the proposed Consent Decree, NPS will continue to implement Winter Closures similar to those implemented under the Interim Strategy in 2007-08. Declaration exhibits 1-4 show the 2007-08 Winter Resource Closures for Bodie Island Spit, Cape Point/South Beach, Hatteras Spit, and South Ocracoke. There was no Winter Closure at North Ocracoke.

The Winter Closure areas shown in PINK on the maps are posted with symbolic fencing (explanatory signs connected by string) and closed to ORV and pedestrian access. ORV access is allowed in a posted corridor along the shoreline outside of the Winter Closures and, in some cases, to access the sound shoreline. For example, at Bodie Island Spit (Declaration exhibit 1), in addition to the shoreline ORV corridor along the ocean and inlet shorelines to the sound shoreline adjacent to Bonner Bridge, there is also an ORV corridor to the northeastern shoreline of the "bait pond" as indicated by the non-Pink corridor on the map.

20. Under the proposed Consent Decree, NPS also will continue to implement Prenesting Closure Areas similar to those implemented under the Interim Strategy. But, under the proposed Consent Decree, the Prenesting Closure Areas will be established by March 15, rather than by April 1. Consent Decree exhibits 1-7, which are re-attached to this declaration, show the Prenesting Closure Areas that were recommended by CAHA Resources Management staff in March 2008 and implemented by NPS at Bodie Island Spit, Cape Point, South Beach, Hatteras Spit, North Ocracoke, and South Ocracoke during the last week of March 2008 (to meet the Interim Strategy target of "by April 1").

On the maps, the areas shown within the RED outline are closed to ORVs and pedestrians. Because the Spits and Cape Point are dynamic landforms, the underlying photographic image used for the maps is sometimes outdated and no longer provides an exact visual representation of the landform. Therefore, on some of the maps, the recent shoreline is shown by a BLUE line, based on GPS coordinates taken by NPS staff. The shoreline corridor that is open to ORV and pedestrian access at these sites is indicated by the gap shown between the shoreline (depicted by either the actual photographic image of the shoreline or the recent shoreline as indicated on some maps as a BLUE line) and the Prenesting Closure Area boundary (indicated by the RED outline).

For example, the 2008 Bodie Island Spit Prenesting Closure Area map (Consent Decree exhibit 1) shows a continuous ORV corridor along the ocean, inlet and sound shoreline to the southwest side of the spit adjacent to Bonner Bridge. In some cases, the Prenesting Closure Area boundary (RED line) intersects with or overlaps the shoreline (actual image or BLUE line), which means there is no access corridor and a "full beach closure" begins, such as is shown along the 1.0 mile of shoreline west of Cape Point on the Cape Point Prenesting Closure Area map (Consent Decree exhibit 2).

21. Under the proposed Consent Decree, as the breeding season progresses, NPS Resources Management staff will monitor Seashore beaches, both inside and outside of the established Prenesting Closure Areas. Monitoring at the Bodie Island Spit, Cape Point, South Beach, Hatteras Spit, North Ocracoke, and South Ocracoke will occur more frequently than prescribed in the Interim Strategy. Monitoring at other locations will occur at the same frequency identified in the Interim Strategy.

22. When NPS Resources Management staff observe breeding behavior (i.e., territorial behavior, courtship/mating, nesting, and chick rearing) involving piping plovers, American oystercatchers, or colonial waterbirds at any location, NPS staff will implement additional resource protection closures based on the modified buffer distances identified in the

proposed Consent Decree. See Declaration exhibit 5, Comparison Tables. These buffers are based directly on the U.S. Geological Survey ("USGS") Protocols, Option B, Moderate Protection recommendations. The piping plover chick buffer is also based, in part, on the Piping Plover Recovery Plan. The buffers in the proposed Consent Decree are "firm" and non-discretionary, though NPS may implement larger buffers if deemed necessary to protect resources.

23. Paragraph 10 of the proposed Consent Decree, sets forth a 1000 m ORV buffer for unfledged piping plover chicks. When the 1000 m ORV buffer is in effect, pedestrians may be allowed limited access along the shoreline within the area during daylight hours, provided that a pedestrian buffer of 300 m is maintained for piping plover chicks, and the appropriate buffers are maintained for the other species that may be present.

As set forth in paragraph 12 of the proposed Consent Decree, NPS has the discretion to allow ORV access during daylight hours, two weeks after the piping plover chicks have hatched, as long as experienced NPS monitors are present to observe the chicks from dawn to dusk and a 300 m buffer between piping plover chicks and ORVs is maintained at all times. The modified access area will not be opened to ORVs each morning

until the location of the brood is known and an adequate buffer is assured.

24. Under the proposed Consent Decree, if the prescribed buffers are inadequate to prevent signs of bird disturbance from ORVs and/or pedestrians at any site, NPS will automatically increase the buffer at that site by 50 m increments until no signs of disturbance occur. If a deliberate violation of a Prenesting Closure Area or Resource Closure occurs that disturbs or harasses wildlife, or vandalizes fencing, nests or plants, NPS will expand the buffer by 50 m on the first offense, 100 m on the second, and 500 m or more on the third, if NPS determines it necessary to prevent further disturbance.

25. In general, under the proposed Consent Decree, buffer distances will be implemented more quickly after breeding behavior is observed than under the Interim Strategy. And, given the larger buffer distances identified in the proposed Consent Decree, the size of the individual closures will be relatively larger than under the Interim Strategy.

26. Under the proposed Consent Decree, NPS will continue the level of monitoring and nest protection for sea turtles that is provided under the Interim Strategy. In addition, NPS will prohibit nonessential vehicle use (i.e., night driving) from 10:00 p.m. to 6:00 a.m., May 1-November 15, with a provision to allow night driving after September 15 as long as the ORV

operator has a special use permit. Also, after September 15, NPS will implement full beach closures around all unhatched sea turtle nests, whereas, under the Interim Strategy ORV traffic is permitted to travel between the nest and the toe of the dune if there is adequate buffer for the nest and room for an ORV corridor.

27. Under the proposed Consent Decree, monitoring and protection of seabeach amaranth plants will be the same as occurs under the Interim Strategy.

28. Under the proposed Consent Decree, as under the Interim Strategy, the number of resource closures and the total amount of area within all the closures combined will likely increase as the breeding season progresses and will peak in mid-to-late July to early-to-mid August when unfledged bird chicks, which require the largest buffer, of multiple species are on the ground at multiple sites. Then, as chicks begin to fledge on into August, the closures will be sequentially removed and beaches will reopen to visitor use.

29. Under the proposed Consent Decree, given that larger buffers will be implemented earlier than under the Interim Strategy, it is likely that under the proposed Consent Decree the effect of Resource Closures on restricting ORV access during the breeding season will be greater and of longer duration than has occurred under the Interim Strategy.



30. Under the proposed Consent Decree, the modified buffer distance that will have the most significant impact on ORV access at the spits and Cape Point is the 1000 m ORV buffer for unfledged piping plover chicks, which will be in effect for at least two weeks after the chicks hatch. In 2007 piping plover nests occurred at 3 locations - Bodie Island Spit, Cape Point and South Ocracoke. If the same occurs in 2008, under the proposed Consent Decree these areas would completely close to ORV access for at least two weeks, if not longer due to other kinds of Resources Closures that could be in effect for other species.

31. Under the proposed Consent Decree, compared to the Interim Strategy, NPS expects pedestrian-only access opportunities during the peak summer to be similar to what has been allowed under the Interim Strategy. Non-ORV areas include the seasonal ORV closures in front of the villages and ORV safety closures for narrow beaches. The proposed Consent Decree will undoubtedly cause a significant increase in the cumulative amount of Resource Closures and a significant reduction in ORV access during the peak summer season. It is difficult to forecast exactly how many bird nests will occur at any one time or at how many different locations. Therefore, it is difficult to forecast the resultant effect on access.

32. Under the proposed Consent Decree, as under the Interim Strategy, the shift from Prenesting Closure Areas and additional bird breeding season Resource Closures to the Winter Closures will occur around September 15, provided all breeding season activity such as chick fledging has been completed at a particular site. Recreational access during the fall and winter will be similar to what has been allowed under the Interim Strategy; all major spits and Cape Point will be accessible, in part, by ORVs.

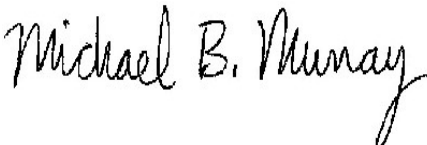
33. The primary impact on ORV access from the additional sea turtle protective measures will be the prohibition of night driving from 10:00 p.m. to 6:00 a.m., May 1-November 15. Night driving may be allowed with a permit between September 16 and November 15. After September 15, full beach closures will be introduced around any remaining unhatched sea turtle nests, once the nests reach their hatch window. These closures could cause reductions in access, or the convenience of access, at specific sites. But, any reduction in access caused by the full beach closures for sea turtle nests after September 15 largely will be offset by the reopening of the majority of the bird-related Resource Closures during the preceding month.

34. In my professional opinion, the proposed Consent Decree will ensure effective resource protection and a reduced but reasonable level of ORV access for the next three years

while NPS completes the ORV management plan and regulation. The Resource Closures anticipated during the breeding season under the proposed Consent Decree will inherently restrict and reduce ORV access at heavily used sites such as the spits and Cape Point during the peak summer season, and disperse use to other locations. Once nesting is completed, the Prenesting Closure Areas and Resource Closures will be removed, except for the relatively small Winter Closures, until the next breeding season, and ORV access to popular sites will be restored for fall and winter fishing.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed this 29th day of April, 2008.

A handwritten signature in black ink that reads "Michael B. Murray". The signature is written in a cursive, flowing style.

Michael B. Murray

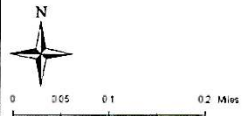
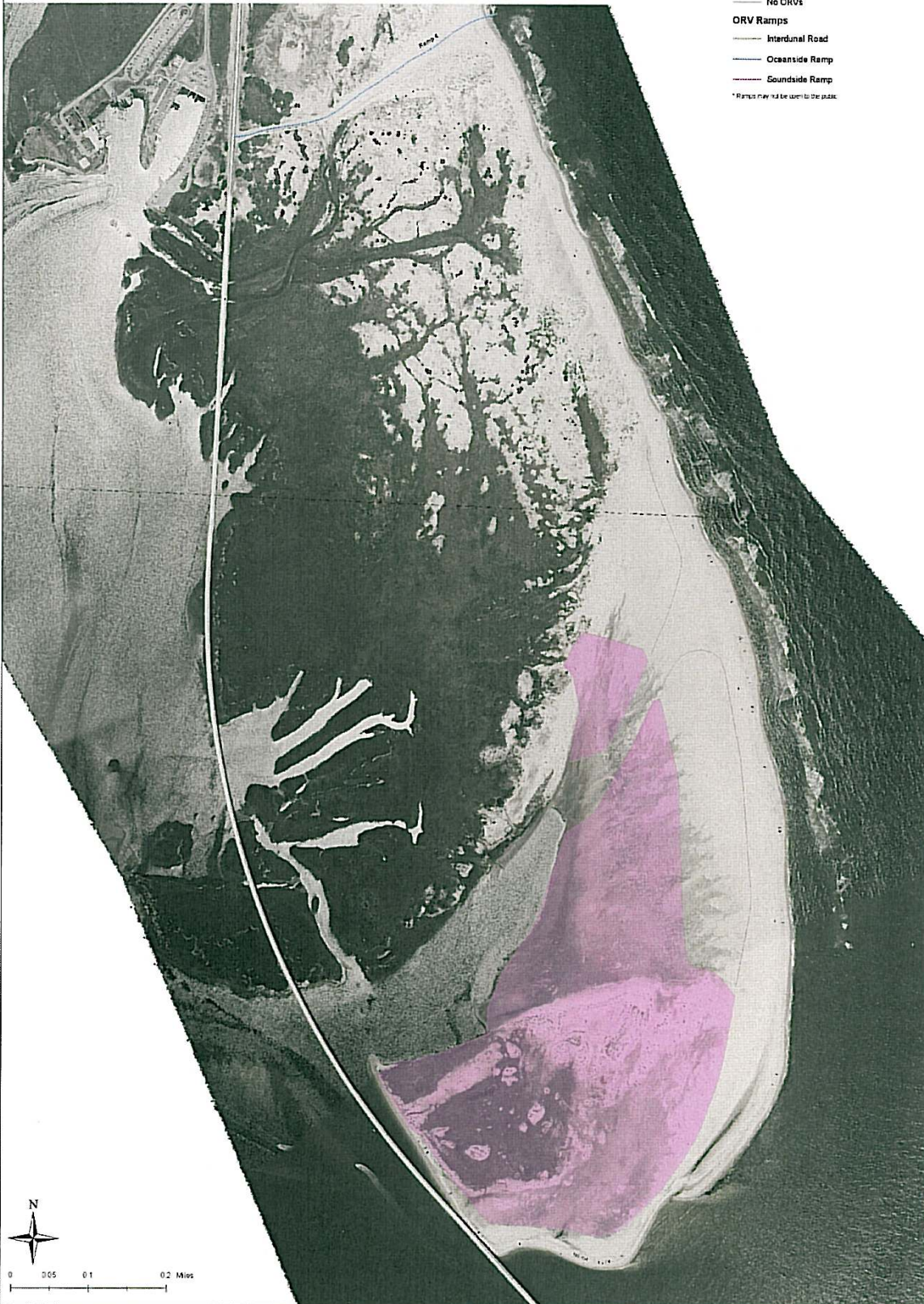
Cape Hatteras National Seashore  
Outer Banks Group

National Park Service  
U.S. Department of the Interior



2007/2008 Winter Resource Closures  
Bodie Island Spit

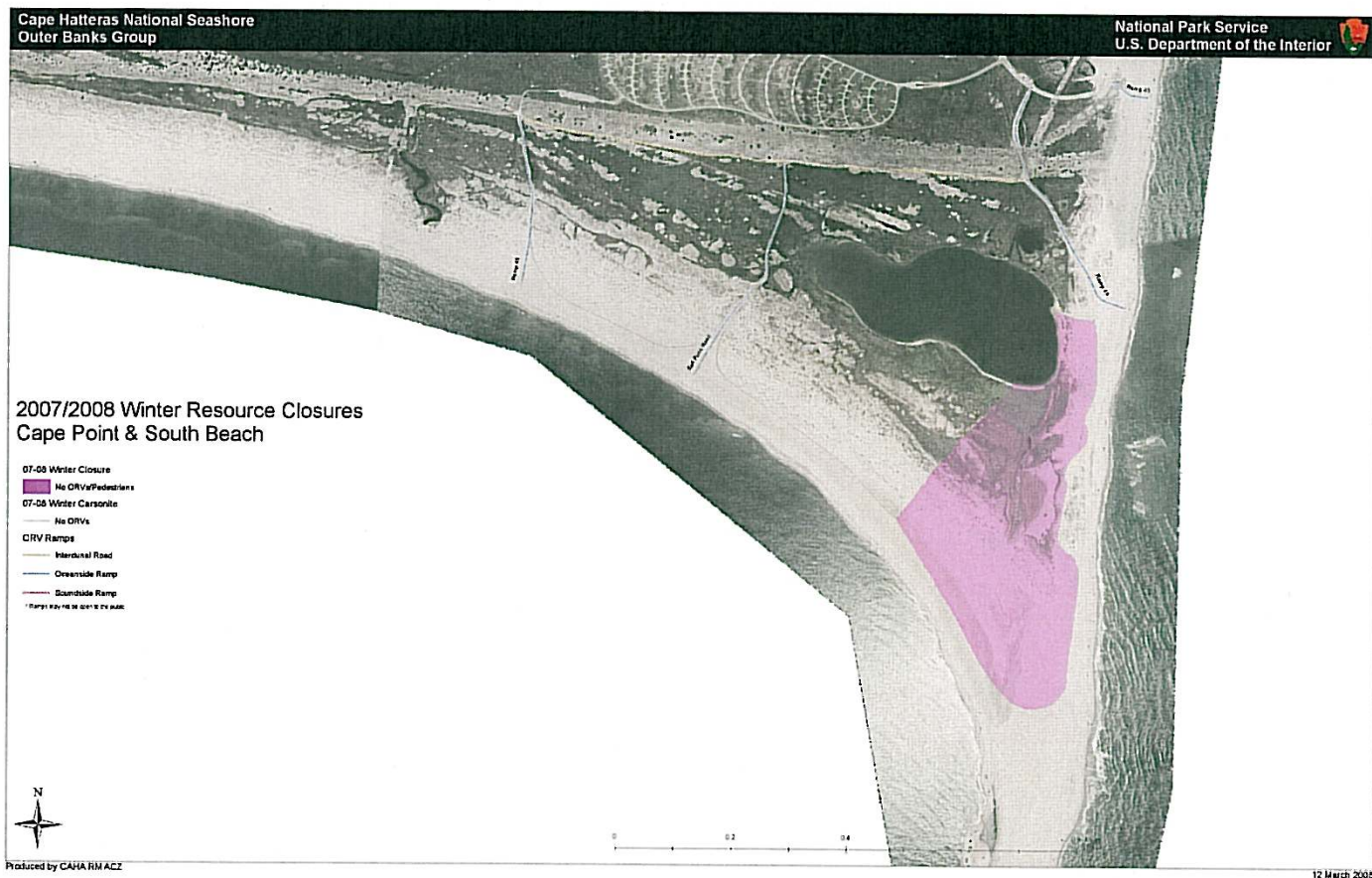
- 07-08 Winter Closure
- No ORVs/Pedestrians
- 07-08 Winter Carsonite
- No ORVs
- ORV Ramps
- Interdunal Road
- Oceanside Ramp
- Soundside Ramp
- \*Ramps may not be open to the public.

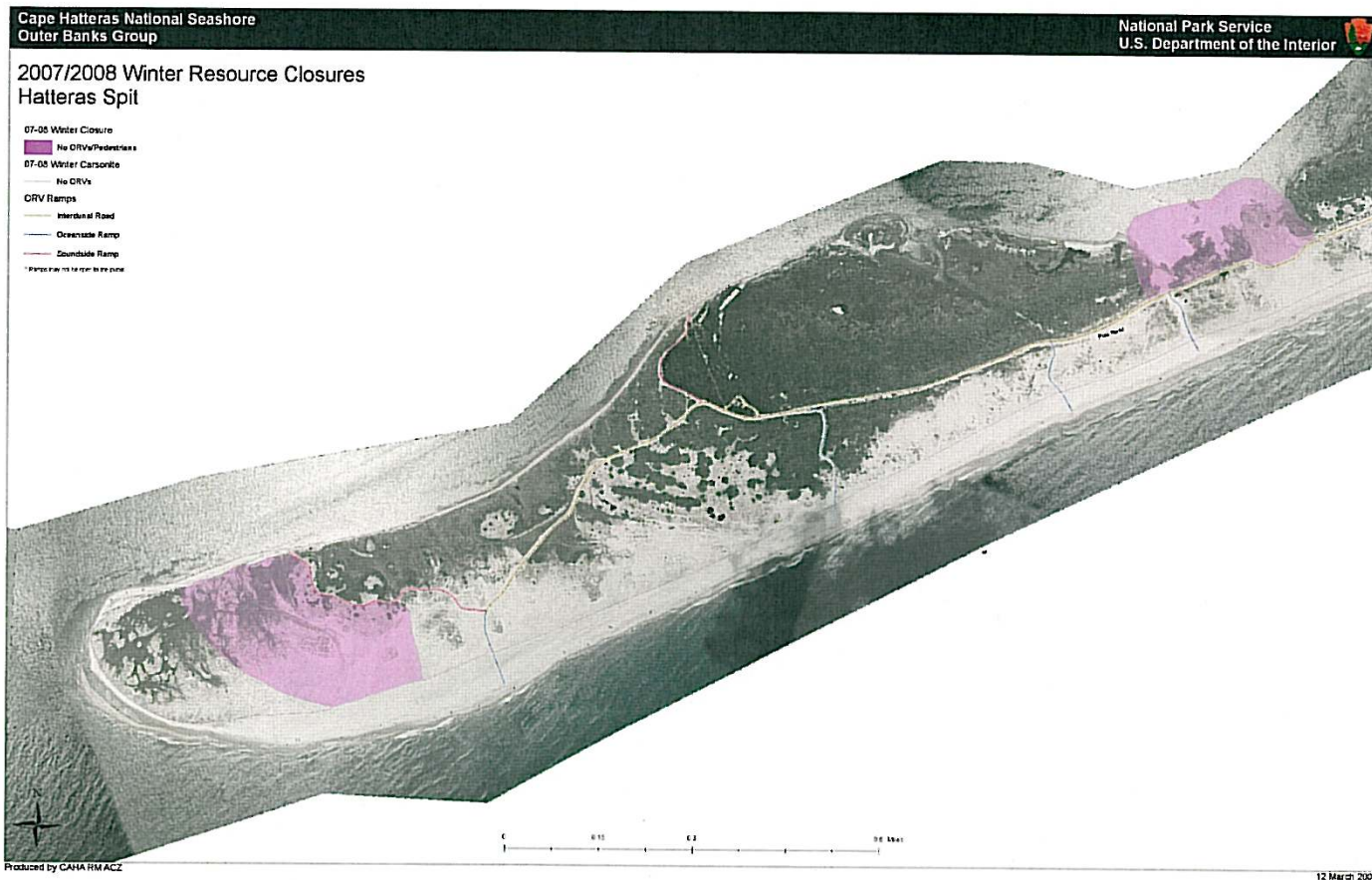


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12 March 2008







Buffers under Interim Strategy<sup>1</sup>

Species	Courtship/Mating Buffer (m)	Nest Buffer (m)	Unfledged Chick Buffer (m)
Piping Plover	46 m (150 ft.) - If additional closures are created around courtship/mating areas, adjust the ORV corridor whenever possible to allow vehicle passage. Allow management to be responsive to individual bird behavior when determining adequacy of closure size.	46 m (150 ft.)	183 m (600 ft) - initially; may vary from 183 M (600 ft) to 914 m (3000 ft) based on mobility of chicks; may be reduced to 91 m (300 ft) after first week if chicks are not highly mobile
Least Tern	Activate closures if a territory is established or a nest located. If territorial or courting birds observed outside of existing closures, based on bird behavior and suitable habitat, expand buffers to accommodate the birds. Provide ORV/ pedestrian corridor above the high tide line.	46-91 m (150-300 ft) based on observed bird behavior	46-91 m (150-300 ft)
Other Colonial Waterbirds	Same as Least Tern	46-91 m (150-300 ft) based on observed bird behavior	46-91 m (150-300 ft)
American Oystercatcher	Same as Least Tern	Establish buffer based on adult's reaction to human disturbance. Closures vary in size based on best professional judgment	46-91 m (150-300 ft)
All Species	n/a	Allow observations to be responsive to individuality in bird behavior when determining adequate size of closure zones around nests.	Allow observations to be responsive to individuality in bird behavior when determining adequate size of closure zones around broods.

<sup>1</sup>Summarized from Finding of No Significant Impact ("FONSI"), Interim Protected Species Management Strategy, Table 2: Action to Be Implemented - Species Management, pp. 34-36.



**Buffers under Proposed Consent Decree<sup>2</sup>**

<b>Species</b>	<b>Breeding Behavior/Nest Buffer (m)</b>	<b>Unfledged Chick Buffer (m)</b>
Piping Plover	50	1000 (ORV only) 300 (Pedestrian only)
Least Tern	100	200
Other Colonial Waterbirds	200	200
American Oystercatcher	150	200

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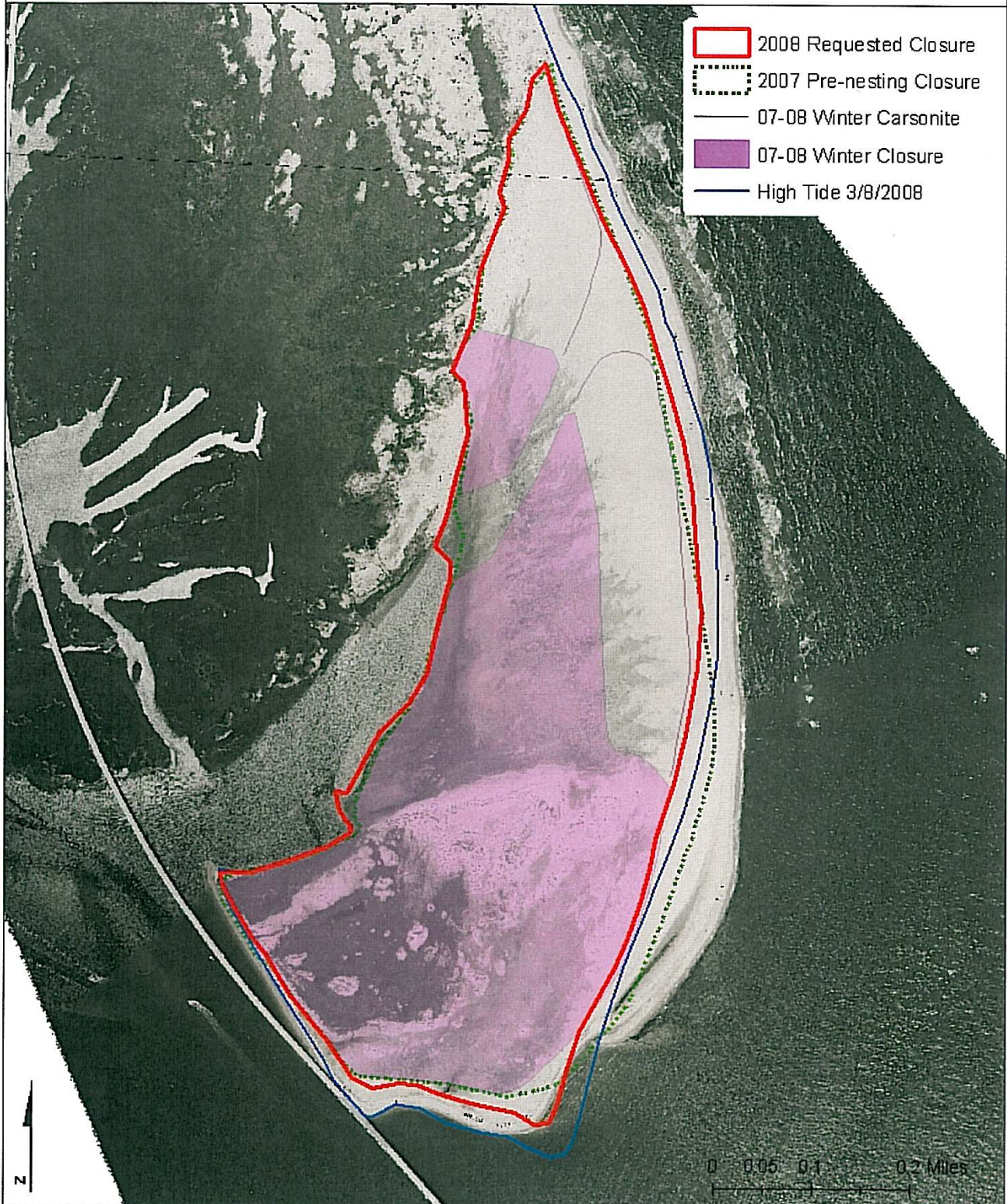
<sup>2</sup>Buffer distances are based directly on the USGS Protocols. Option B, Moderate Protection recommendation; and, for piping plover chicks, buffer is also based on the recommendation in the Piping Plover Recovery Plan.

Cape Hatteras National Seashore  
North Carolina

National Park Service  
U.S. Department of the Interior



# BI08-001 Bodie Island Pre-nesting Closure Request



Produced by CAHA RMACZ

10 March 2008

Ex. 1

