

From: [Thayer Broili](#)
To: [Darrell Echols](#); [Mike Murray](#)
Cc: [Britta Muiznieks](#)
Subject: Re: Fw: Couple of things.
Date: 08/25/2008 09:40 AM
Attachments: [CAHA IPSMS FONSI Tables 1-3-8-22-08.doc](#)

Here's a rough cut at the below. We didn't address everything below, but we talked about it in our group work session to put this thing together. The attached was developed by staff at an "around the table" session all day last Friday. Please note that for birds, we offer two "plans", one with limited staffing of 8-10 staff (SM1), another with about twice the staff (SM2). The turtle "plan" is only at one level.

Britta voiced the opinion that this should probably be reformatted to reflect species rather than actions. She may undertake this week. Again, we recognize this is very rough and was done in a "hurry up" manner, but at least it gives you a "rock". I suggest that when it's discussed, all staff that participated in creating it be allowed to participate in discussion since I certainly can't fully explain or defend it at this time. Many of the recommendations are based largely on the thoughts of those that are closest to the on-the-ground, daily management, specifically Doug McG, Tyler, and Michelle. I was very impressed with both their knowledge and thought processes as we went through the exercise. The document is on the shareall under Division Folder-Resource Management; Britta folder; turtle folder.



CAHA IPSMS FONSI Tables 1-3-8-22-08.doc

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**Darrell
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To Thayer Broili/CAHA/NPS@NPS
cc

08/13/2008 08:16 AM Subject Fw: Couple of things.

Thayer,

We need to draft "resource protection measures" for the ORV management plan. I would like you to coordinate this effort and have something drafted for Mike's review by August 25. These measures should include monitoring requirements, closure triggers, timing restrictions, buffer distances, whether pedestrian access can be allowed, etc. The measures should be based on the fact that all of our

proposed action alternatives would close the sensitive resources areas (bird hot spots) to ORV use by March 15 thru at least Aug 31, but may allow some pedestrian access within 10 meters of the high tide line. This may mean that we do not have to utilize the current concept of prenesting closures. The format of Tables 1 and 2 of the Interim Strategy FONSI might be a good format to follow, but not necessarily the content.

A couple of things to keep in mind:

- Buffers should be based on science, but not necessarily following the USGS protocols as they are written. What do staff think should trigger implementation of an AMOY or CWB buffer? Are there other buffer sizes that provide adequate protection, but may allow some type of access?
- Try to keep the measures simple and straightforward
- Measures should be easy to implement and require the lowest amount of physical effort possible, while still maintaining adequate resource protection
- Try not to have three different re-opening criteria (time periods) for prenesting areas, lost nest, and when chicks fledge)
- Try to keep measures easy for visitors to understand what is closed, where closures are expected, and how long closures will remain. This would allow visitors and businesses to better plan their activities.
- Keep in mind access needs of commercial fisherman, which are different than recreational needs.
- Measures need to consider both birds and sea turtles.

Mike would be comfortable doing one new approach in all three action alternatives, which would require only one set of monitoring and protection measures.

Thanks,
Darrell

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TABLE 1: ACTION TO BE IMPLEMENTED — SPECIES OBSERVATION

ACTIVITY	
<p>Survey Time and Frequency PRE-Nesting</p>	<p>Piping plover: March 15 – March 31 survey recent breeding areas at Bodie Island Spit, Cape Point and South Beach, Hatteras Spit, and the northern and southern ends of Ocracoke one time per week. By March 1, all potential habitats will have evaluated. PIPL pre-nesting closures will be recommended based upon that habitat evaluation. Those closures will installed by March 15. March 15 – June 15 survey recent breeding areas (last three years) at Bodie Island Spit, Cape Point and South Beach, Hatteras Spit, and the northern and southern ends of Ocracoke three times per week (or every other day) in pre-nesting closures and potential new habitat two times per week. Survey for Wilson's plover during piping plover surveys. The PIPL pre-nesting areas will be surveyed 3 times per week. To mitigate disturbance to nesting birds surveys may need to be curtailed</p> <p>American oystercatcher: March 15 – June 15 survey recent breeding areas two times per week. Colonial waterbirds: May 1 – June 15 survey recent breeding areas two times per week.</p>
<p>Survey Time and Frequency Life Stages</p>	<p><u>Courtship/Mating:</u> If species are observed exhibiting territorial or courtship behavior during two consecutive surveys in historic recent breeding habitat, observe three times per week. If scrapes or eggs are observed, survey three times per week. Survey potential new habitat two times per week.</p> <p><u>Nesting:</u> Piping plover: Observe nests from a distance that does not disturb the birds, based on professional judgment, one time daily. Approach nests once per week to observe and record data. American oystercatcher and colonial waterbirds: Observe nests at least three times per week from a distance. For incubating birds that cannot be observed from a distance, check nests every three days. Wilson's plover: Observe nests incidental to piping plover monitoring.</p>

TABLE 1: ACTION TO BE IMPLEMENTED — SPECIES OBSERVATION

ACTIVITY	
	<p>Unfledged Chicks: Piping plover: During the first week, observe continually during daylight hours Under SM1 observe once daily, under SM2 observe am and pm daily. After the first week, if the closure is reduced or remains the same size, keep continuous observation. If the closure is enlarged, observe once daily.</p> <p>American oystercatcher: Observe once daily.</p> <p>Colonial waterbirds: Under SM2 Observe broods at one day to two three day intervals and record data. Under SM1 observe broods weekly. (Staff feels that Higher intensity observations do not add to overall data)</p> <p>Wilson's plover: Observe broods incidental to piping plover monitoring.</p> <p>All Species: When broods are mobile, provide more frequent observation and enforcement presence. All observations end when all chicks have fledged.</p>
	<p>Non breeding/wintering: Piping plover: As provided in the USFWS Amended Biological Opinion (2007) (attachment 1 to this FONSI), the NPS will monitor the presence, abundance, and behavior of migrating and wintering piping plovers from August 1 – March 31 of each year. NPS will monitor presence, abundance and behavior of migrating and wintering PIPL, AMOY, WIPL, REKN beginning after the last PIPL chick has fledged on the seashore and ending March 01. At each session, specific observations include vehicle, pedestrian, and pet tracks in posted habitat; any signs of predators, including species; specific management measures in place at the time of the observation; observed behaviors; and reactions to disturbance by pedestrians, pets, or vehicles.</p> <p>American oystercatcher, red knot, Wilson's plover: Survey with piping plover.</p> <p>Colonial waterbirds: Winter/Non-breeding habitat not surveyed.</p> <p>Establish winter closures no later than September 1 based on habitat evaluation and recent use.</p>
Data Collected	<p>Piping plover: Use GPS to document breeding areas and nest locations.</p> <p>Record locations where territorial/courtship behavior occurs.</p> <p>Record presence and abundance of birds.</p> <p>American oystercatcher and colonial waterbirds: Use GPS to document nest and colony locations. Record presence and abundance of pre-nesting birds.</p>
Sea Turtles	
Survey Time and Frequency	<p>Sea turtle patrol will begin on May 1, unless leatherback nests have been reported within the state, in which case CAHA will follow the direction of NCWRC. Patrol will continue until September 15, or two weeks after the last sea turtle nest is found, whichever is later.</p> <p>Conduct daily morning surveys by ATV/UTVs and some ORVs for crawls and nests on all beaches before onset of heavy public ORV use. Daily surveys for nests end September 15, or two weeks after the last sea turtle nest was found, whichever is later. Periodic monitoring (e.g., every two to three days) for unknown nesting and emerging hatchlings will continue, especially in areas of high visitation</p>

TABLE 1: ACTION TO BE IMPLEMENTED — SPECIES OBSERVATION

ACTIVITY	
	<p>from that date until September 16— November 15.</p> <p>Monitoring will also occur for post-hatchling washbacks during periods when there are large quantities of seaweed washed ashore or following severe storm events. Nest observations stop when all nests have hatched or excavation indicates that the nest was not viable.</p> <p>Once a light filter fence is installed, monitor nests daily for signs of hatchling emergence.</p>
Data Collected	<p>Follow the North Carolina Wildlife Resources Commission Handbook and record:</p> <ul style="list-style-type: none"> -Turtle species -Nest vs. false crawl -Location (physical description and GPS location) -If nest needs to be relocated and, if so, why and where (new physical description and GPS location), number of eggs relocated, and time of day -Necessary protective measures for nest and hatchlings -Information regarding any post hatching nest excavation and analysis <p>Examine all nests after hatching to determine productivity rates. Excavate nests in the evening a minimum of 72 hours after hatching event. In cases where hatching events or dates were unknown, unearth nest cavities 80–90 days after the lay date. Any live hatchlings found during excavations will be released after dark on the same day as excavation.</p> <p>For strandings the following will be recorded: species, location, measurements, and signs of human interactions. Samples and photos will be collected when necessary. Necropsies will be conducted when possible.</p>
Seabeach Amaranth	
Survey Time and Frequency	<p>April 4 During bird and turtle surveys, note any seedlings or plants and record location.</p> <p>August Annual survey of potential habitat (some bird closure areas may not be surveyed due to potential to disturb nesting birds).</p> <p>April July– September Before opening any species closure or identifying alternate ORV corridors, survey for seedlings/plants.</p> <p>End observations when all plants have died back.</p>
Data Collected	Record location of all individual plants or plant clusters using a GPS and note if the plant is located in an area open or closed to recreational use.
Essential Vehicle Use (EVU)	
Bird Surveys	Piping plover: During bird surveys, NPS vehicles will remain outside of established resources closures.

TABLE 2: ACTION TO BE IMPLEMENTED — SPECIES MANAGEMENT



Activity	
<p>Species Management 1 (SM1): 8-10 Total field personnel. Will require larger longer lasting buffers with less m and will alleviate the need for constant monitoring. Species Management 2 (SM2): 20-22 total field personnel. Buffers will be customized towards birds presence and movement.</p>	
<p>Closures/ Buffers</p>	<p><u>Pre-Nesting:</u></p> <p>American oystercatcher: March 15 SM1: Pre-nesting closures with recent breeding activity would be instituted by March 15. If closures are not occupied by May 1 (will verify date with our data), then closures will be adjusted or removed. In newly occupied habitat closures will be installed when three consecutive days of scraping or territorial behaviors are observed or nests are found.</p> <p>SM2: Closures will activate when territorial or courtship behavior is observed in recent breeding areas. In newly occupied habitat closures will be installed when three consecutive days of scraping or territorial behaviors are observed or nests are found.</p> <p>Activate closures if a territory is established or a nest located. Closures removed when areas have been abandoned for a two week period. For SM1 and SM2 for birds with no breeding history closures may be removed early based upon best professional opinion.</p> <p>After August 1 the 2-week removal period will no longer be required for closure removal.</p> <p>Piping plover: April 4 March 15 In February or March of each year, NPS natural resource staff to conduct an annual assessment of piping plover breeding habitat to plan pre-nesting closures in recent breeding areas that are adapted to current habitat and physiographic conditions. Close recent breeding areas by posting symbolic fencing by April 4 March 15. Remove closures if no bird activity is seen by July 15 June 15 (will verify date with our data) or when area has been abandoned for a 2-week period, whichever comes later.</p> <p>Colonial waterbirds: May 1 Activate closures if a territory is established or a nest located. Closures removed when areas have been abandoned for a two week period. After August 1 the 2-week removal period will no longer be required for closure removal.</p> <p>All Species:</p> <p>SM1: Pre-nesting closures (points and spits) and SRA closures (hotspots/significant resource areas) would not allow ORV or pedestrian access.</p> <p>SM2: Designate a 100-foot-wide ORV and pedestrian corridor at points and spits. Outside of ORV corridor, prohibit pedestrian access to breeding areas beyond the symbolic fencing-resource closures. Delineate the corridor with posts placed up to 100 feet above the high tide line. In areas of reduced corridor width (i.e., narrower than 100 feet), post a reduced speed limit of 10 mph. At SRA closures no ORV or pedestrian corridors would be designated, due to the narrow beach width of these areas.</p> <p>Pre-nesting closures may be modified at anytime as long as minimum buffers are maintained around breeding birds of all species.</p>
	<p><u>Courtship/Mating:</u></p>

TABLE 2: ACTION TO BE IMPLEMENTED — SPECIES MANAGEMENT



Activity	
	<p>Piping plover: If courtship or copulations are observed outside of existing pre-nesting closure or expand buffer to ensure 150-foot buffer for the observed birds.</p> <p>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.</p> <p>American oystercatcher and colonial waterbirds: SM1: If territorial or courting birds observed outside of existing closures, based on bird behavior and suitable habitat, establish 300 meter buffers to accommodate the birds. Provide ORV/pedestrian corridor above the high tide line if the buffer allows for and does not occur in the intertidal zone. SM2: If territorial or courting birds observed outside of existing closures, based on bird behavior and suitable habitat, establish 50 meter buffers. (Can be adjusted base on disturbance) (Observed courtship for colonial waterbirds will only include scraping to trigger the establishment of a closure).</p>
	<p><u>Nesting:</u></p> <p>Piping plover: Establish 150-foot 50-meter buffer/closure around piping plover nests occurring outside existing closures. Expand closures, if necessary, using flexible increments dependent on observed bird behavior. When resource closures are created around nests adjust the ORV corridor whenever possible to allow vehicle passage reduce the width of the ORV corridor if necessary. In areas in which the buffer zone would eliminate the ORV corridor, identify alternate ORV routes if available or provide a bypass (see “Short-term Bypass Route Criteria” on page 11 of this FONSI) if possible.</p> <p>American oystercatcher: Establish buffer/closure based on adult’s reaction to human disturbance. Closures Buffers vary in size dependent on best professional judgment. (from alternative D) under SM1 will be the same as courtship and mating – 300 meters. Under SM2 buffers will be 50 meters. If the buffer falls within the intertidal zone a full-beach closure will result. When resource closures are created around nests, adjust the ORV corridor whenever possible to allow ORV passage. Reduce width of ORV corridor if necessary. In areas in which the buffer zone would eliminate the ORV corridor, identify alternate ORV routes if available, or provide a bypass (see “Short-term Bypass Route Criteria” on page 11 of this FONSI) if possible. Allow observations to be responsive to individuality in bird behavior when determining adequate size of closure zones around nests.</p> <p>Colonial waterbirds: Establish a buffer/closure of 150 feet to 300 feet under SM1 at 300 meters and under SM2 at 50 meters around the nest or colony based on observed bird behavior, while maintaining ORV/pedestrian corridor. If the buffer and the corridor overlap each other, then staff will reduce corridor width if necessary. In areas in which the buffer zone would eliminate the ORV corridor, identify alternate ORV routes if available, or provide a bypass (see “Short-term Bypass Route Criteria” on page 11 of this FONSI) if possible. Allow observations to be responsive to individuality in bird behavior when determining adequate size of closure zones around nests.</p> <p>Reduce width of ORV/pedestrian corridors for American oystercatcher and colonial waterbirds will be approached as a research opportunity to gather data useful for the long-term ORV management plan/EIS to test for the distance at which vehicle disturbance to nesting American oystercatcher and colonial waterbirds occurs.</p> <p>All species: The park retains the discretion to expand buffers under SM1 and SM2 depending on staffing and bird behavior.</p> <p>Allow observations to be responsive to individuality in bird behavior when determining adequate size of closure zones around nests.</p> <p>If nest is lost, until August 1, buffers remain in place 2-3 weeks after nest is lost to determine if pair will re-nest, if no other species nesting in area. After August 1, closures will be removed if all nesting is complete.</p>

TABLE 2: ACTION TO BE IMPLEMENTED — SPECIES MANAGEMENT



Activity	
	<p><u>Adult Foraging:</u></p> <p>Piping plover: For breeding adults (with an associated scrape or nest territory) foraging outside of a closure on two consecutive surveys, expand the buffer to include foraging site. These closures are intended to provide foraging opportunities close to breeding sites.</p> <p>Colonial waterbirds, American oystercatcher, and Wilson's plover: No additional buffers/closures.</p>
	<p><u>Unfledged Chicks:</u></p> <p>Piping plover: SM1: Establish a minimum 600-foot 1000 meter buffer on either side of brood based on observation of bird behavior and terrain conditions at site. No ORV or pedestrian access until all chicks have fledged. SM2: Establish a 300 meter buffer for ORV and Pedestrians on either side of brood, based on observed behavior, buffer area may require expansion up to 3,000 feet 1000 meters if chicks are highly mobile. Based on observed behavior (i.e., mobility of the brood) and the capability to continually observe mobility and behavior, buffer zone can be reduced after the first week to no less than 300 feet 200 meters, but may require expansion up to 3,000 feet 1000 meters if chicks are highly mobile. Buffer moves with chicks. Close bypass route at night if buffer zone, is less than 600 feet (as identified on p. 8 of the USFWS Amended Biological Opinion (2007) (attachment 1 to this FONSI)).</p> <p>When resource closures are created around broods, adjust the ORV corridor whenever possible to allow vehicle passage. Reduce ORV corridor if necessary. In areas in which the buffer zone would eliminate the ORV corridor identify alternate ORV routes if available. If there are no alternate ORV routes, then if possible establish a bypass (see "Short term Bypass Route Criteria" on page 11 of this FONSI). Close beach to recreation access down to the waterline, if necessary to allow chicks access to foraging areas.</p> <p>American oystercatcher: SM1: Establish 150-foot to 300-foot 300 meter buffer zone when unfledged chicks are present. SM2: Full beach closure 200 meters. Adjust buffer zone as needed when chicks are mobile. Provide alternate ORV/pedestrian access route or bypass to open areas beyond the closure, if possible.</p> <p>Colonial waterbirds: SM1: Establish 150-foot to 300-foot 300 meter buffer zone when unfledged chicks are present. SM2: Full beach closure 200 meters. Adjust buffer zone as needed when chicks are mobile. Provide alternate ORV/pedestrian access route or bypass to open areas beyond the closure, if possible.</p> <p>For all species: Allow observations to be responsive to individuality in bird behavior when determining adequate size of closure zones around broods.</p> <p>Reopen 100-foot-wide ORV corridor in recent or current nesting areas after chicks fledge. Areas outside of corridor, including the upper beach remain available for protected species use. Re-establish 150-foot ORV corridor after August 31.</p> <p>SM2: ORV access would not be allowed until 2 weeks after AMOY chicks have fledged (observed flight of 30 meters), a pedestrian corridor would be established prior to 2 week requirement. NO pets would be allowed in pedestrian corridor.</p>
<p>Non Breeding/ Wintering Closures</p>	<p>For piping plover: Suitable interior and sound-side habitats at spits and at Cape Point closed year-round to all recreational users to provide for resting and foraging for all species. For example, at present, such suitable habitats include ephemeral ponds and moist flats at Cape Point, Hatteras Spit, Ocracoke, and Bodie Island Spit. Actual locations of suitable foraging and resting habitat may change periodically due to natural processes.</p>
<p>Sea Turtles</p>	

TABLE 2: ACTION TO BE IMPLEMENTED—SPECIES MANAGEMENT



Activity	
<p>Nest Closures/ Buffers</p>	<p>Establish a buffer approximately 30 feet by 30 feet with symbolic fencing and signage around environmental conditions at the nest site.</p> <p>Approximately 50—55 days into incubation, closures expanded to the surf line. The width of the closure based on the type and level of use in the area of the beach where the nest was laid:</p> <ul style="list-style-type: none"> a. vehicle-free areas with little or no pedestrian traffic – 75 feet wide (total width); b. villages or other areas with high levels of day use –150 feet wide (total width); c. areas with ORV traffic – 350 feet wide (total width). <p>Opposite the surf line on the upper end of the closure, the closed area expanded to 50 feet where possible, but no less than 30 feet duneward from the nest. Traffic detours behind the nest area clearly marked with signs and reflective arrows.</p> <p>If any violation occurs to an un-expanded turtle nest (less than 50 days of incubation), or an expanded turtle nest (more than 50 days of incubation), that does or is intended to cause a decrease in the viability of the eggs or overall success of the nest, the closure will be expanded. If the violation occurs at an un-expanded nest, the closure size will increase to 50 feet by 50 feet. If the violation occurs within an expanded turtle nest, the closure will become a full beach closure, regardless of the nest's placement on the beach. If the expanded closure is already a full beach closure (i.e. the nest is at the foot of a dune), than the closure will be expanded 25 meters in both directions. If a full beach expansion from a violation will result in the closure of a ramp, then the closure will be modified to continue to allow access out of the ramp.</p> <p>Where present within closure, vehicle tracks manually smoothed with rakes or a steel mat attached to an ATV, so as not to impede hatchlings attempting to reach the surf.</p> <p>Use light filtering fence behind nests nearing hatch dates to block light pollution from the villages and vehicles operating on the beach after dark.</p> <p>If multiple nests are located near each other (within 150 feet), and have similar hatch dates (14 days), then closures will encompass all nests in the area, and will not be removed until all nests within the closure have hatched.</p>
<p>Nest Relocation</p>	<p>By April 15th, areas deemed unsuitable for turtle nests (i.e. high erosion rate) will be identified by Park staff. Maps and descriptions of these areas will be analyzed by NCWRC prior to nesting season.</p> <p>When a nest is found, staff assesses need for nest relocation and follows relocation guidance identified in the NCWRC handbook.</p> <p>If it is determined the nest will not be relocated, it will be immediately protected with a symbolic fence measuring approximately 30 feet by 30 feet and signage. Closure size may vary at the discretion of staff due to the environmental factors at a nest location.</p> <p>If a nest is threatened by a storm event, NPS will consult NCWRC to determine appropriate action.</p>
<p>Light Management</p>	<p>Establish turtle friendly lighting standards and/or reduce light for all Seashore (NPS) structures.</p> <p>Encourage concessioners to install turtle friendly lighting.</p> <p>Develop educational material to inform visitors about their impact on the success of sea turtle nests.</p>

TABLE 2: ACTION TO BE IMPLEMENTED—SPECIES MANAGEMENT



Activity	
Research	<p>Support research efforts looking at the sex ratios of turtles.</p> <p>Respond to sea turtle strandings in a timely manner, and report all information, pictures, and signs of human interaction to NCWRC. Necropsies of strandings will be done when possible.</p>
Seabeach Amaranth (SBA)	
Buffers	<p>April 15 – November 30</p> <p>If a plant/seedling is found outside of an existing closure, the Seashore will erect symbolic fencing with signage creating a 30-foot by 30-foot 10 meter by 10 meter buffer around the plant. If plants are located next to each other, the area will be expanded to create one enclosure protecting several plants.</p> <p>If a SBA is found during the survey prior to reopening a bird closure to ORV and pedestrian use, the Seashore will protect the SBA as described above and reopen the areas of the bird closure where no plants exist.</p> <p>Areas reopened if no plants are present by September 1. Where plants occur, the closed areas will be reopened after the plants have died.</p>
Predator Management	<p>Trappers will target red and gray fox, raccoons, cats and other predators for removal.</p> <p>Piping plover: Nests surveyed to count eggs and look for predator tracks.</p> <p>As applicable, predator exclosures are erected when nest found with eggs.</p> <p>American oystercatcher and colonial waterbirds: Nests surveyed to count eggs and look for predator tracks.</p> <p>Sea Turtle: Nests surveyed to count eggs and look for predator tracks. Predator exclosures may be placed over nests if predator tracks or nest predation is evident.</p> <p>SBA: No predator management.</p>
Conservation Measures	<p>Conservation measures are discretionary activities intended to minimize or avoid adverse effects of an action on listed species or critical habitat, to help implement recovery plans, or to develop information. Conservation measures outlined in the USFWS Amended Biological Opinion (2007) (attachment 1 to the FONSI) will be considered for implementation. The Seashore will notify the USFWS when any of these conservation measures are implemented.</p>

1

2

TABLE 3: RECREATION AND SEASHORE MANAGEMENT

Activity

TABLE 3: RECREATION AND SEASHORE MANAGEMENT

Activity	
ORV	
Pre-Nesting Closures	Between identified pre-nesting closures dates (see table 1), designate an ORV corridor up to 100 feet wide along oceanside and soundside shoreline in recent breeding areas. Delineate corridor with posts placed up to 100 feet above the high tide line. In areas with a reduced corridor width due to species management actions, maintain the corridor with a posted speed limit of 10 mph.
ORV Corridors and Access	<p>April 4 March 15– August 31</p> <p>Piping plover: Designate approximately 100-foot-wide ORV corridor above mean high tide line in breeding areas used within past three years.</p> <p>Delineate corridor with posts placed up to 100 feet above the high tide line.</p> <p>In areas of reduced corridor width (i.e., less than 100 feet), post traffic signs and 10 mph speed limit. Adjust the ORV corridor whenever possible to allow vehicle passage. If an ORV corridor is not feasible for safety reasons or insufficient area, identify alternate ORV route if possible. If there is no alternate route available, Seashore staff will consider establishing a bypass route (see “Short-term Bypass Route Criteria” on page 11 of this FONSI). Seashore staff will allow observations to be responsive to individuality in bird behavior when determining adequate size of closure zones.</p> <p>If alternate route or bypass is not feasible, initiate an ORV closure.</p> <p>American oystercatcher and colonial waterbirds: Provide ORV/pedestrian corridor above the high tide line. In areas of reduced corridor width (i.e., less than 100 feet), post traffic signs and 10 mph speed limit. Adjust the ORV corridor whenever possible to allow vehicle passage. If an ORV corridor is not feasible for safety reasons or insufficient area, identify alternate ORV route if possible. If there is no alternate route available, Seashore staff will consider establishing a bypass route (see “Short-term Bypass Route Criteria” on page 11 of this FONSI). Seashore staff will allow observations to be responsive to individuality in bird behavior when determining adequate size of closure zones.</p> <p>If alternate route or bypass is not feasible, initiate an ORV closure.</p> <p>Sea Turtles: May 1 – September 15 (or two weeks after the last turtle nest is found, whichever is later)</p> <p>Outside of recent bird breeding areas, ORV use will be restricted to a corridor 150 feet duneward of the mean high tide line and seaward of the toe of the dunes or vegetation line, whichever is less.</p> <p>On all ORV beaches that are wide enough to support it, a 10 meter backshore buffer will be installed seaward of the vegetation line for the protection of potential sea turtle nesting habitat. This buffer will extend for the full length of the beach and will be delineated by brown carsonites.</p> <p>A 30-foot by 30-foot buffer zone of signed, stringed fencing will be placed around each nest in any place where recreation occurs. When a nest has reached is approximately 50 days of incubation days old, where possible, ORV traffic will be routed around the nest on the duneward side, maintaining a buffer of 50 feet where possible, but no less than 30 feet. If the filter fence closure for hatchlings will block access to spits and Cape Point, identify an alternate route (e.g., existing interdunal road, NC-12). If an alternate route is not available, an attempt will be made to identify a bypass route on the duneward side of the nest, so long as there continues to be at least 30 feet from the nest to the ORV corridor. If alternate route or bypass is not feasible, initiate an ORV closure.</p>

TABLE 3: RECREATION AND SEASHORE MANAGEMENT

Activity	
Night Driving	<p>No restrictions on night driving.</p> <p>Night-time driving prohibited May 1 – September 15. After September 15, night driving allowed with a permit. Permit will be awarded for free after applicant attends a 10 minute video about sea turtles and driving safety. The permit will be good for September 15th – November 1st, after which night-driving is open to all users. Vehicles on the beach after 10pm September 15th – November 1st that do not have a permit will be asked to leave the beach, and/or given a citation.</p> <p>If it is determined by Park staff that certain areas are more susceptible to night-driving lights, that area may be closed to vehicular traffic at the direction of Park management.</p> <p>Turtle closures will follow the same size requirements throughout the hatching season.</p>
Pedestrian	
Pedestrian Access Outside of Bird Closures	Pedestrians allowed 24-hour access to all Seashore beaches outside of existing resource closures.
Pedestrian Access in Turtle and Seabeach Amaranth Closures	Pedestrians allowed 24-hour access to all Seashore beaches outside of existing resource closures.
Other Recreation	
Boat Access	<p>36 CFR 3.6 prohibits launching non-commercial, recreational boats/vessels except at designated launch sites.</p> <p>SM1: Permits may be issued for commercial fishing to allow ORV access or boat launching in pedestrian-only areas as well as in ORV areas but not in areas closed for resource protection.</p> <p>SM2: Permits may be issued for commercial fishing to allow ORV access or boat launching in pedestrian-only areas as well as in ORV areas, but not if a dedicated bio-technician was available to monitor commercial fishing activities in areas closed for resource protection.</p> <p>Along sound shoreline where resource closures occur attempt to keep boats 150 feet from the habitat, the extent of the seashore jurisdiction. Erect signs, where practicable, around the perimeter of the closures to alert boaters of closures.</p>
Pets	<p>36 CFR 2.15, Pets: pets must be crated, caged, restrained on a leash, or otherwise physically confined at all times in all areas of the Seashore.</p> <p>Pets prohibited, even if on leash, from the landward side of the posts delineating the ORV corridor at the spits (Bodie, Hatteras, Ocracoke) and Cape Point.</p> <p>Pets prohibited within symbolic fencing around any bird closure or sea turtle closure area.</p>

TABLE 3: RECREATION AND SEASHORE MANAGEMENT

Activity	
Other	<p>Kite flying, kite boards, and ball and Frisbee tossing prohibited within or above all bird closures.</p> <p>36 CFR 2.38, Explosives: all fireworks are prohibited in the Seashore at all times.</p> <p>Beach equipment (i.e chairs, canopies, volleyball nets, water sports gear, etc.) are prohibited on the Seashore at night. Turtle patrol and law enforcement will tag equipment found at night. Owners have 24 hrs to remove equipment for confiscated by NPS staff.</p> <p>Beach fires prohibited within 100 meters of any expanded turtle nest.</p>
Seashore Management	
Essential Vehicle Use	<p>Essential vehicles allowed in closures subject to guidelines in Essential Vehicles section of Appendix G of the U.S. Fish and Wildlife Service Piping Plover (<i>Charadrius melodus</i>), Atlantic Coast Population, Revised Recovery Plan (USFWS 1996a, as cited in the strategy/EA).</p> <p>In the event of an emergency, the protection of human life takes precedence over all other management activities. To the extent practicable, emergency response vehicle operators will consult with trained resources management staff regarding protected species before driving into or through resource closures; however, prior consultation may not always be practical.</p> <p>Essential vehicles will avoid driving within turtle nest closures.</p>
Essential Vehicles: Speed	Not to exceed 10 mph, whenever possible.
Outreach and Compliance	
	<p><u>General:</u></p> <p>Provide information about endangered species at the visitor centers.</p> <p>Enforce proper trash disposal (pack in/pack out) and anti-wildlife feeding regulations throughout the Seashore, including proper disposal of fishing bait and filleted fish carcasses. Provide education and outreach materials regarding the impacts of trash disposal, wildlife feeding, fireworks, and pets on sensitive Seashore species.</p> <p>Solicit from interested parties how to convey information about the species management program.</p> <p>Notify the public of species management closures that will temporarily limit ORV traffic. Send a press release to local and regional newspapers and contact local tackle shops and ORV organizations when species closures established or reopened.</p> <p><u>Piping plover:</u></p> <p>Provide periodic patrols to observe and enforce compliance with piping plover closures.</p> <p><u>Sea Turtles:</u></p> <p>Conduct educational programs during the sea turtle hatching season where public school students, visitors, and locals could learn about sea turtles by participating in post-hatching nest examinations, strandings, etc.</p>

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Activity	
	Provide information to the public about nesting sea turtles and measures taken by the Seashore to protect nests and hatchlings. <u>Seabeach Amaranth:</u> Post information about seabeach amaranth at all ORV ramp bulletin boards. Notify public of resource closures and openings.

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