

Appendix A



USFWS

The tundra swan winters within Back Bay NWR impoundments and shallow bay

Findings of Appropriateness and Compatibility Determinations

COMPATIBILITY DETERMINATION

USE: Wildlife Observation, Photography, Environmental Education, and Interpretation

REFUGE NAME: Back Bay National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITIES

Executive Order No. 7907 dated June 6, 1938; Migratory Bird Conservation Act (16 USC 715-715r); Emergency Wetlands Resources Act (100 Stat. 3582-91).

National Wildlife Refuge System Administration Act of 1996, as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 6688dd, et seq.)

REFUGE PURPOSES

- “...as a refuge and breeding ground for migratory birds and other wildlife” (E.O. 7907).
- “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (16 U.S.C. 715d, Migratory Bird Treaty Act).
- “... the conservation of wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” (16 U.S. C. 3901b. 100 Stat. 3583, Emergency Wetlands Resources Act).

NATIONAL WILDLIFE REFUGE SYSTEM MISSION

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Pub. L. 105–57; 111 Stat. 1252)

DESCRIPTION OF USE

(a) What is this use? Is it a priority public use?

The uses are wildlife-oriented recreational activities: wildlife observation, photography, environmental education and interpretation, including special self-instructed groups participating in these activities. These are priority public uses of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997.

(b) Where would the use be conducted?

Refuge Barrier Spit (Northern/Public Use Zone) (Map A-1): This developed area comprises approximately 280 acres, and serves more than 110,000 visitors annually. This area includes a Visitor Contact Station (VCS), interior and exterior interpretive displays, mounted wildlife viewing

scopes, outdoor environmental education classroom and activity pier, pedestrian trail system, two boardwalks providing access to four miles of beach, canoe/kayak launch, wildlife viewing facility with interpretive displays, viewing scopes and adjacent restroom, and an entrance station with approximately one mile of entrance road that exists at the northern portion of the Refuge's barrier spit property. We plan to expand this zone for public use in order to access the newly constructed wildlife viewing facility (mentioned above), located at the northern edge of the "C" Pool impoundment (see next paragraph).

Refuge Barrier Spit (Southern/Impoundment Zone) (Map A-1): Comprising more than 900 acres of restored wetlands, this section of the Refuge currently provides two dike roads that serve as trails through the Refuge, and provides wildlife viewing and photography opportunity. Visitors must pass through the Refuge Barrier Spit, Northern Zone in order to access this area. No public vehicle traffic or parking is permitted in this area. This area serves more than 20,000 visitors annually. The only change to wildlife-oriented activities planned in this area is to expand public access to the wildlife viewing facility at the northern edge of "C" Pool.

Refuge West Side (Map A-2): The Asheville Bridge Creek Environmental Education Center (ABCEEC) is a 1,800 square foot converted home on a 17-acre parcel. It provides environmental education, interpretation, and wildlife observation and photography via a short self-guided interpretive trail, outdoor classroom, and a wildlife viewing/activity pier. The Horn Point Canoe/Kayak Launch Facility provides wildlife observation and photography opportunities. There is also a wildlife viewing platform at the Frank Carter Impoundment on Colchester Road.

We have future plans to construct a new Refuge Headquarters and Visitor Contact Station on Tract #244 at the corner of Sandbridge Road and New Bridge Road, which will provide these uses. Located here will be a multi-purpose trail system that will allow for wildlife observation, photography, and self-guided and personal service interpretation via interpretive displays. This proposed public use area comprises approximately 61.5 acres, and is expected to serve more than 150,000 visitors annually. Once the new facility is constructed, we also propose to convert a Refuge house (Tract #135) into an environmental education center and utilize the existing ABCEEC as a maintenance facility.

Three additional canoe/kayak launch sites are planned to be constructed, which will facilitate wildlife observation and photography. These new sites are discussed in detail in a separate Compatibility Determination (see Boat Launching).

(c) When would the use be conducted?

Refuge Barrier Spit (Northern/Public Use Zone): Year-round, one-half hour before sunrise to one-half hour after sunset. A temporary closure to these activities would be implemented during any scheduled Refuge hunt dates.

Refuge Barrier Spit (Southern/Impoundment Zone): From April 1 through October 31, from one-half hour before sunrise to a one-half hour after sunset. Public vehicle access/parking is prohibited year-round. The Southern Zone oceanfront beach remains open to these activities year-round, except on scheduled public hunt dates.

The impoundments provide undisturbed resting and feeding for migratory waterfowl during the winter months; therefore, this area is closed to all public access from November 1 through March 31, with the exception of several monthly wildlife viewing tram trips, provided by Refuge staff. The only change to wildlife-oriented activities planned in this area is to expand public access to the wildlife viewing facility.

Refuge West Side: Year-round from one-half hour before sunrise to one-half hour after sunset, at all locations, with the exception of Horn Point Canoe/Kayak Launch Site, which is open from April 1 through October 31 annually. The ABCEEC site is for educational and other organized group visits, by reservation only, for the purpose of environmental education.

(d) How would the use be conducted?

We would conduct these four priority uses much as we conduct them presently. Such activities would be allowed on established roads, trails, and in buildings that have been designed to accommodate such uses, in areas that are the least sensitive to human intrusion. These uses would be conducted for the general public, as well as for organized groups, including schools and scout groups. Groups of 10 or more will be required to have permission to visit the Refuge for these activities, and a seasonal entrance fee from April 1 through October 31 will be charged to all, with the exception of school groups, scouts on merit badge projects assignments, or children under 16 years of age. As currently exists, there will be a mix of personal and non- personal program delivery, including interpretive signing, audio-visual presentations, brochures, special events, guided walks and talks, exhibits, web site information, and informal visitor information contacts.

Self-guided groups are those who wish to host their own wildlife dependent activities. As stated above, groups of 10 or more are required to have permission for these activities. Each request must be presented in writing with details of who, what, where, when, why, and how the activity will be conducted. Each request has different logistics, and therefore, would be evaluated for impacts on Refuge purposes. Using professional judgment, as long as there is no significant negative impact to natural resources or visitor services, or violation of Refuge regulations, a Special Use Permit will be issued outlining the framework in which this use can be conducted. Refuge staff will ensure compliance with the Permit.

(e) Why is the use being proposed?

Wildlife observation and photography, and environmental education and interpretation are four of the six priority public uses of the National Wildlife Refuge System. If compatible, they are to receive enhanced consideration over other secondary public uses.

AVAILABILITY OF RESOURCES:

The resources necessary to provide and administer these uses, at current use levels, is available within current and anticipated Refuge budgets. Staff time associated with administering this use is related to assessing and conducting maintenance, including kiosks, gates and signs, monitoring potential impacts of the use on Refuge resources and visitors, and providing information to the public about the use.

The Visitor Services Manager is available for public outreach. A Park Ranger will monitor visitor use and user interactions. The Park Ranger will conduct law enforcement activities to provide for visitor safety and resource protection. Maintenance staff performs the regular maintenance and repairs.

Permitting self-guided groups is also within the resources available to administer our Visitor Services Program. Additional staff costs are incurred to review each request, coordinate with the outside entity and process a Special Use Permit, if necessary. Compliance with the terms of the Permit is within the regular duties of the Station Law Enforcement Officer.

ANTICIPATED IMPACTS OF THE USE:

Wildlife observation, photography, environmental education, and interpretation can affect the wildlife resource positively or negatively. A positive effect of public involvement in these priority public uses will be a better appreciation and more complete understanding of Refuge wildlife and habitats. That can translate into more widespread, stronger support for the Refuge, the Refuge System, and the Service.

Wildlife observation and photography have the potential of impacting shorebird, waterfowl, marshbirds and other migratory bird populations feeding and resting near the trails and on beaches during certain times of the year. Use of upland trails is more likely to impact songbirds than other migratory birds. Human disturbance to migratory birds has been documented in many studies in different locations.

Direct Impacts

Direct impacts have an immediate affect on wildlife. We expect those impacts to include the presence of humans disturbing wildlife, which typically results in a temporary displacement without long-term effects on wildlife individuals or populations. Some species will avoid the areas people frequent, such as the developed trails and the buildings, while others seem unaffected by or even drawn to the presence of humans. Overall, those effects should not be significant, because most of the Refuge will experience minimal public use.

Conflicts arise when migratory birds and humans are present in the same areas (Boyle and Samson 1985). Response of wildlife to human activities includes: departure from site (Owen 1973, Burger 1981, Korschgen et al 1985, Henson and Grant 1991, Kahl 1991, Klein 1993), use of suboptimal habitat (Erwin 1980, Williams and Forbes 1980), altered behavior (Burger 1981, Korschgen et al. 1985, Morton et al. 1989, Ward and Stehn 1989, Havera et al. 1992, Klein 1993), and increase in energy expenditure (Morton et al. 1989, Belanger and Bedard 1990). McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. The location of recreational activities impacts species in different ways. Miller et al. (1998) found that nesting success was lower near recreational trails, where human activity was common, than at greater distances from the trails. A number of species have shown greater reactions when pedestrian use occurred off trail (Miller, 1998). In addition, Burger (1981) found that wading birds were extremely sensitive to disturbance in the northeastern U.S. In regard to waterfowl, Klein (1989) found migratory dabbling ducks to be the most sensitive to disturbance and migrant ducks to be more sensitive when they first arrived, in the late fall, than later in winter. She also found

gulls and sandpipers to be apparently insensitive to human disturbance, with Burger (1981) finding the same to be true for various gull species.

For songbirds, Gutzwiller et al. (1997) found that singing behavior of some species was altered by low levels of human intrusion. Pedestrian travel can impact normal behavioral activities, including feeding, reproductive, and social behavior. Studies have shown that ducks and shorebirds are sensitive to pedestrian activity (Burger 1981, 1986). Resident waterbirds tend to be less sensitive to human disturbance than migrants, and migrant ducks are particularly sensitive when they first arrive (Klein 1993). In areas where human activity is common, birds tolerated closer approaches than in areas receiving less activity.

Indirect Impacts

Laskowski et al. (1993), studied behavior of snowy egrets, female mallards, and greater yellowlegs on Back Bay NWR within 91.4 meters of impoundment dikes used by the general public. Behavior of snowy egrets was recorded during August and September 1992 to represent post-breeding marsh and wading birds. Mallards were monitored during migration (November 1992) and during the winter January (1993). Greater yellowlegs' behavior was observed during the northward shorebird migration (May 1993). Behavior was monitored during the typical public activities of walking, bicycling, and driving a vehicle past the sample sites.

The study found that snowy egret resting behavior decreased and alert behavior increased in the presence of humans. Preening decreased when humans were present, but this change was not significant. Feeding, walk/swim, and flight behaviors were not related to human presence. Female mallards in November increased feeding, preening and alert behaviors in the presence of humans. Resting, walk/swim, and flight behavior were not influenced by human presence. In January, female mallard resting and preening behavior were not influenced by the presence of humans. However, feeding, alert, walk/swim, and flight behaviors were related to human presence. Greater yellowlegs increased alert behavior in the presence of humans. No other behaviors were affected. Maintenance behavior (combined feeding, resting, and preening) decreased when humans were present for all study species. In addition, this decrease was accompanied by an increase in escape behavior by each species. Maintenance behavior of mallards in January decreased in the presence of vehicles and combined disturbance. Escape behavior increased when vehicles were present. Maintenance behavior of greater yellowlegs declined when bicycles and vehicles were present but was not influenced by pedestrian presence.

The presence of bicycles and vehicles increased escape behavior. Snowy egrets and female mallards increased movement between subplots and to areas within the study area but further from the disturbance.

During a five year study which involved nine different species of birds, researchers found only minimal evidence that intrusion affected bird distributions (Gutzwiller and Anderson 1999). This study also found that the species affected by intrusion were not consistent from year to year or within study areas and could be due to habituation of intrusion (Gutzwiller and Anderson 1999).

People can be vectors for invasive plants by moving seeds or other propagules from one area to another. Once established, invasive plants can out-compete native plants, thereby altering habitats

and indirectly impacting wildlife. The threat of invasive plant establishment will always be an issue requiring annual monitoring and treatment when necessary. Our staff will work at eradicating invasive plants and educating the visiting public. Also, opening Refuge lands to public use can often result in littering, vandalism, or other illegal activities on the Refuge.

Cumulative Impacts

Impacts may be minor when we consider them alone, but may become important when we consider them collectively. Our principal concern is repeated disruptions of nesting, resting, or foraging birds. Our knowledge and observations of the affected areas show no evidence that these four, priority, wildlife-dependent uses cumulatively will adversely affect the wildlife resource. Although we do not expect substantial cumulative impact from these four priority uses in the near term, it will be important for Refuge staff to monitor those uses and, if necessary, respond to conserve high-quality wildlife resources.

Refuge staff, in collaboration with volunteers, will monitor and evaluate the effects of these priority public uses to discern and respond to any unacceptable impacts on wildlife or habitats. To mitigate those impacts, the Refuge will continue to close areas to the public to protect wildlife during critical life periods.

PUBLIC REVIEW AND COMMENT:

As part of the CCP process for Back Bay NWR this compatibility determination will undergo extensive public review, including a comment period of 30 days following the release of the Draft CCP/EA.

DETERMINATION (CHECK ONE BELOW):

Use is Not Compatible

Use is Compatible With the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

No off-road or off-trail access will be permitted, except for emergency or administrative purposes, for the current motor vehicle access permit program for North Carolina residents, and for hunters.

For self-guided groups, each request must be presented in writing with details of who, what, where, when, why, and how the group activity will be conducted. Each request will then be evaluated for impacts to the Refuge. Using professional judgment, as long as there is no significant negative impact to natural resources or visitor services, or violation of Refuge regulations, a Special Use Permit will be issued outlining the framework in which this use can be conducted.

JUSTIFICATION:

These four priority public uses will provide compatible educational and recreational opportunities for visitors to enjoy Refuge resources, and improve their understanding and appreciation of fish and wildlife, ecology, refuge management practices, and the relationship of plant and animal populations in the ecosystem. Refuge visitors will better understand the Service role in conservation, and opportunities, issues, and concerns faced in management of our natural resources. Further, they will understand the impact that human presence, disturbance, and/or consumption can cause to these resources. Likewise, these four priority uses will provide opportunities for visitors to observe wildlife habitats firsthand, and learn about wildlife and wild lands at their own pace in an unstructured environment. Authorization of these uses will result in a greater constituency for achieving Refuge goals, and, ultimately, the Service mission. These activities will not materially interfere with or detract from the mission of the NWRS or purposes for which Back Bay NWR was established.

Signature: Refuge Manager _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

Mandatory 15-year re-evaluation date: _____
(Date)

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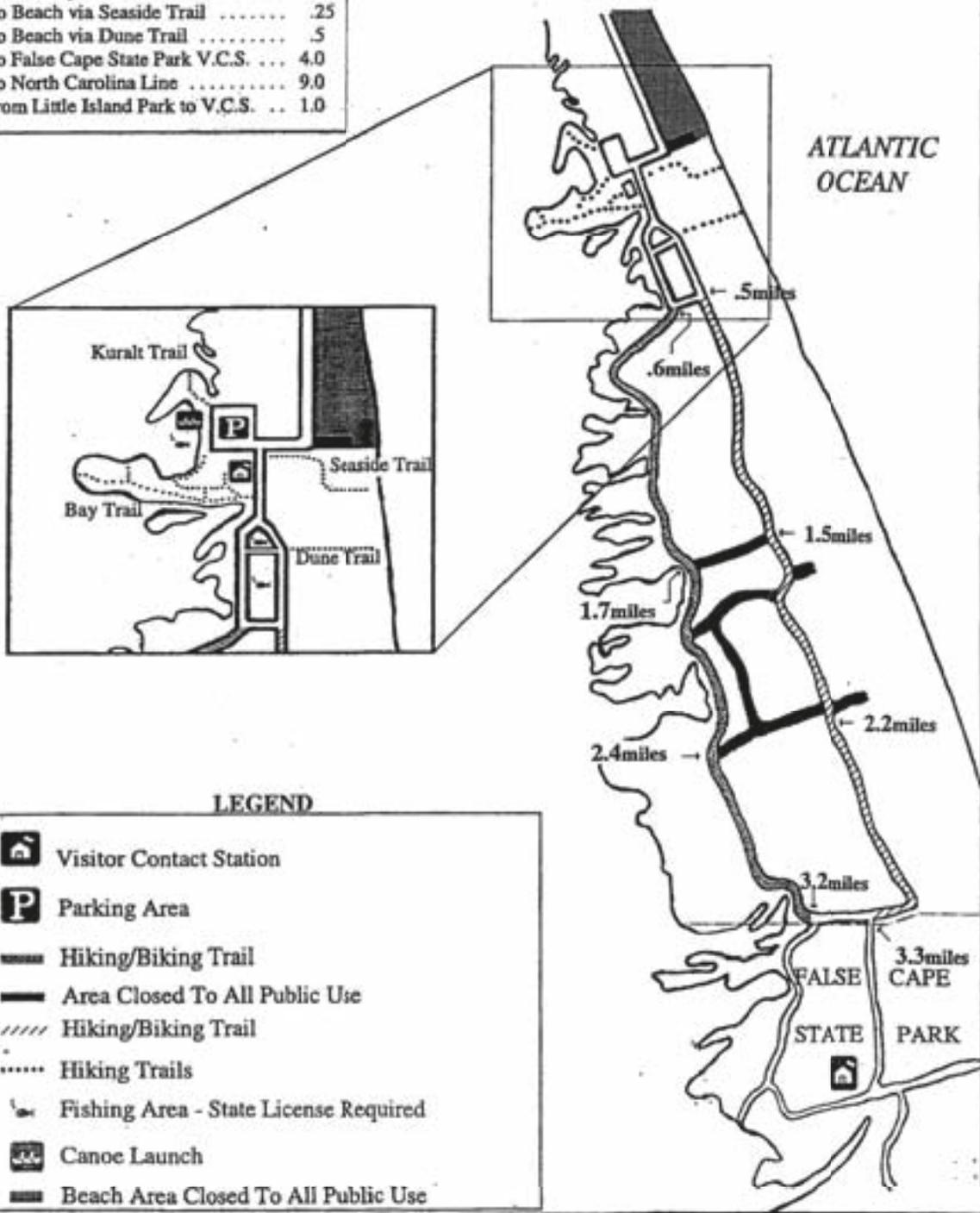
Appendix A: Findings of Appropriateness and Compatibility Determinations

Map A-1

Back Bay National Wildlife Refuge

One-way Mileage from V.C.S.

End of Bay Trail4
To Beach via Seaside Trail25
To Beach via Dune Trail5
To False Cape State Park V.C.S. ...	4.0
To North Carolina Line	9.0
From Little Island Park to V.C.S. ..	1.0



Back Bay National Wildlife Refuge

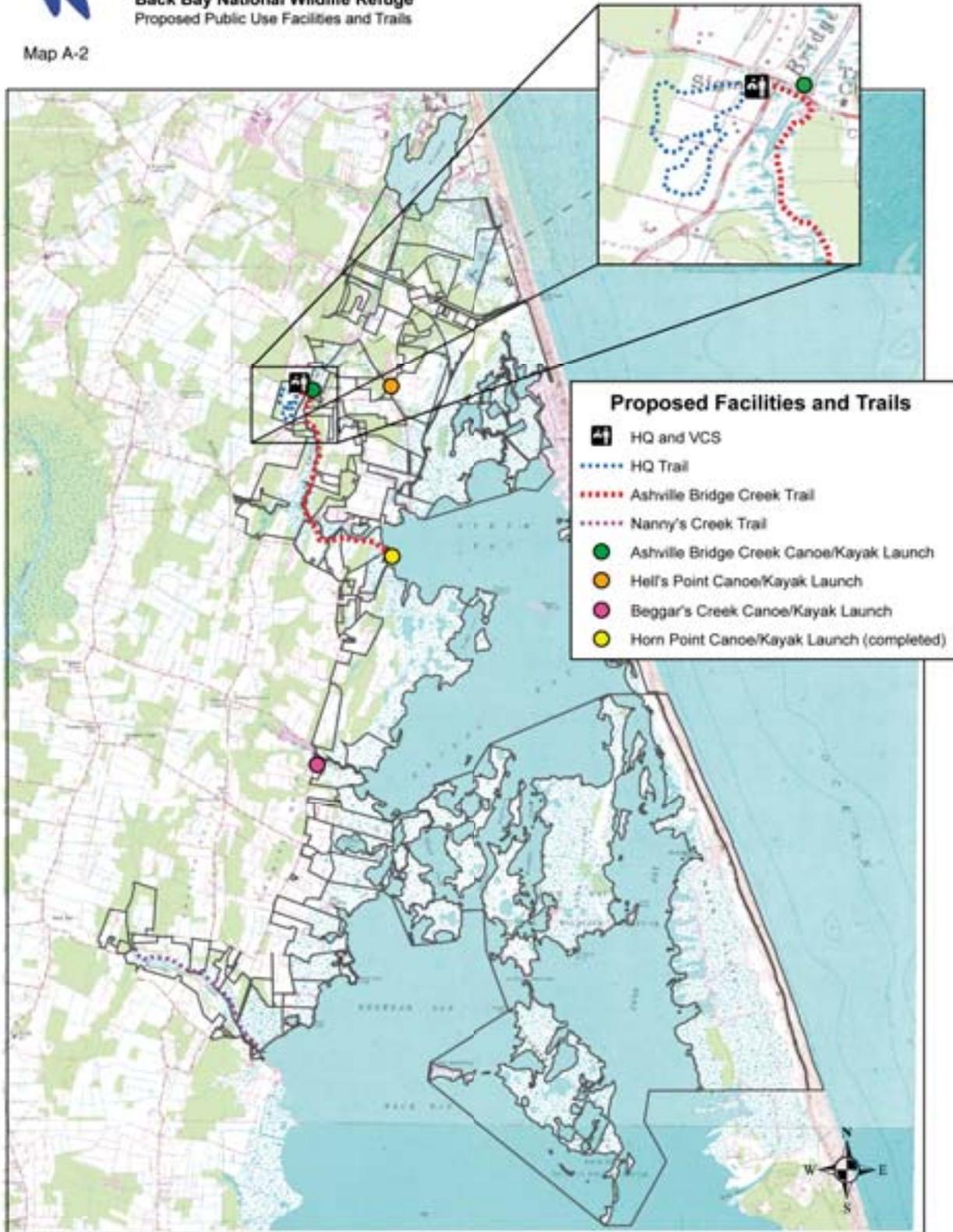
Appendix A: Findings of Appropriateness and Compatibility Determinations



Back Bay National Wildlife Refuge
Proposed Public Use Facilities and Trails

Draft Comprehensive Conservation Plan

Map A-2



Map Sources:
USGS, USGS 2005
USFWS refuge boundaries & other refuge information
To be used for planning purposes only. December 2005.



Back Bay NWR GIS Lab, December 2005

Back Bay National Wildlife Refuge

COMPATIBILITY DETERMINATION

USE: White-tail Deer and Feral Hog Hunting

REFUGE NAME: Back Bay National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITIES

Executive Order No. 7907 dated June 6, 1938; Migratory Bird Conservation Act (16 USC 715-715r); Emergency Wetlands Resources Act (100 Stat. 3582-91).

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REFUGE PURPOSES

- “...as a refuge and breeding ground for migratory birds and other wildlife” (E.O. 7907).
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“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Pub. L. 105–57; 111 Stat. 1252)

DESCRIPTION OF USE

(a) What is the use? Is the use a priority public use?

The use is white-tail deer and feral hog hunting. Hunting is a priority public use of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

(b) Where would the use be conducted?

Eight hunting zones (Map A-3) totaling 2,094 acres would be open for public hunting. Seven of the zones are adjacent to the oceanfront; six of these are south of the maintenance compound and one north of the office/Visitor Contact Station. The first zone is on Long Island in Back Bay. Habitats of hunted areas include 1,037 acres of open marsh, 284 acres of forested habitat, and 686 acres of Long Island fields, forest, and open marshes.

In our Draft Comprehensive Conservation Plan, we propose to expand deer hunting opportunities on the North and West sides of the Refuge on 1,394 acres. Deer and hog hunting opportunities will be provided at the following locations (Map A-4):

- Sandbridge Beach area, north and south of Sandbridge Road on Tracts 101d, 102, 103, 104, 104a, 104b, 106, 108b, and 110. Parking would be provided at the old tower pad on Tract 107, on Tract 106b, and we would coordinate with the City of Virginia Beach for possible parking at the Sandbridge Fire Station and along the utility right-of-way adjacent to Tract 106b;
- Sandbridge Road at the “old hunt club” on Tract 104b. This portion of Tract 104b has an existing road and parking area on site.
- Sandbridge Road at the “reforestation site” on Tract 125a. This area has an existing road and parking area on site.
- Colchester Road on Tract 150. This area has an existing road and parking area on site.
- At the end of Banks Lane on Tract 127a (bow only). Parking would be provided on federal property at the end of Banks Lane;
- Muddy Creek Road on Tracts 163, 166, and 169 (bow only). Parking would be provided on federal property on Tracts 163a and 166;
- Muddy Creek Road at Pleasant Ridge Road on Tract 194, with parking on site.

(c) When would the use be conducted?

The State determines hunting seasons annually, usually beginning October 1 and ending in early January. The deer and hog hunt on the barrier spit of the Refuge is usually conducted for 7 days in October; currently split between four days the first week, with the three remaining days occurring two weeks later. The Refuge evaluates the hunt on an annual basis, and may slightly reduce or increase the hunt to consider factors such as species and hunter numbers, as well as habitat impacts.

New hunting zones proposed in the CCP will be established in two phases in order to accomplish existing habitat management objectives. Once established upon completion of the CCP, each new zone will be open approximately 3-5 consecutive days in each of October, November, and December, in accordance with VDGIF season dates, unless safety or overriding resource concerns would make hunting incompatible. The Refuge will annually evaluate the hunt to consider resource conditions related to hunting.

Within 3 years of CCP completion the following zones are planned to be open:

- Sandbridge area, north and south of Sandbridge Road on Tracts 101d, 102, 103, 104, 104a, 104b, 106, 108b, and 110.
- Banks Lane on Tract 127a (bow only).
- Muddy Creek Road on Tracts 163, 166, and 169 (bow only).
- Muddy Creek Road at Pleasant Ridge Road on Tract 194.

10 years after CCP completion the following zones are planned to be open:

- Sandbridge Road at the “old hunt club” on Tract 104b.

- Sandbridge Road at the “reforestation site” on Tract 125a.
- Colchester Road on Tract 150.

(d) How would the use be conducted?

The Refuge permits hunting within state guidelines in compliance with a hunt program that we adjust each year to ensure safety and good wildlife management. Hunt season dates, limits and/or number of hunters per day are adjusted as needed to achieve balanced wildlife population levels within carrying capacities. (There are no limits or quotas on feral hogs, as these are considered a nuisance species). Back Bay National Wildlife Refuge has held an annual deer hunt since 1986. The deer and feral hog hunt program is a cooperative effort with the State of Virginia Department of Game and Inland Fisheries (VDGIF), the State Department of Conservation and Recreation, False Cape State Park (FCSP), and a contractor who administers the lottery system to which hunters apply.

Through the lottery process it allows the hunters to select the day and zone of their choice. If they do not get selected for this specified day and zone, the option of “any day or zone” can be selected as an alternative. Rules and regulations are posted on the Cyberdata website along with maps. This site also allows the hunter to purchase the required state hunting license. Hunter’s can access Cyberdata through VDGIF and Back Bay NWR websites. Paper applications provided by VDGIF are also available at sporting goods stores as well as a local vendors. Upon applying by website or pamphlet, the newly adapted “Buddy System” allows a hunter to bring someone with them to hunt. On each hunt day, a maximum of 62 hunters are allowed to hunt within the eight identified hunt zones (2,094 acres). If these slots are not filled, the stand-by hunter (hunters that did not get selected through the lottery system) along with a “Buddy” are then selected through a lottery system conducted on the Refuge. Stand-by hunters can then choose the remaining slots available.

This existing hunt is highly managed by Refuge and FCSP staff, and volunteers. On each day of the hunt, upon registration, a signed rules and regulations confirmation sheet is turned in and a permit is issued to each hunter. A hunter safety orientation is provided and then the hunters are shuttled to their designated zones. In cooperation with False Cape State Park, hunters are picked up every hour and return to the registration station for data collection on harvested game and check out.

Expansion of the deer hunt as proposed in the CCP will also be administered as a lottery hunt, in cooperation with VDGIF and the existing contract with Cyberdata to which hunters will apply (see above). However, the hunt will not be highly managed daily by staff, like the existing hunt. Forty-four hunters will be allowed to hunt the new zones, which is approximately two hunters per 50 acres (including the “Buddy”). Hunters applying to hunt the new zones can select a preferred zone and month to hunt. Selected hunters will be permitted to hunt all allowable days (3-5 to be determined at a later date) within their selected month. There will be no stand-by hunters permitted. In the selection notice, the hunters will receive their permit, which shall be carried at all times, parking pass, regulations, and harvest data card. Hunters will park in the area assigned to their selected zone, with their parking pass placed on the vehicle dashboard. Hunters will be required to return the signed regulations and harvest data card to a designated drop box in order for the Refuge to collect hunter effort and harvest data. If selected hunters do not return the required information, those individual will be ineligible for the lottery the following year.

Signage will be posted along all hunt zone boundaries. Refuge law enforcement as well as state law enforcement would ensure that all hunters follow State and Refuge regulations. No “drive-hunting” will be allowed – only still-hunting would be permitted. Dogs are not allowed when hunting deer and feral hogs. In addition, no rifles or crossbows will be allowed – shotguns are allowed.

(e) Why is the use being proposed?

Annual hunting of white-tailed deer is often necessary to minimize population growth due to the species’ high reproductive potential. The presence of an established deer herd in poor (barrier island) habitats at Back Bay NWR requires hunting of the herd because of the poor soils and very limited forage. This herd has been hunted since 1986; an approach that has since maintained a constant population size, healthy individuals, and minimized habitat damage. Non-native feral hogs root in soft wetland soils, eating the roots and tubers of waterbird food-plants and decreasing the quantity and quality of plant material available to native animals and migratory waterfowl. Hog rooting along dike slopes increases the potential for erosion. Additionally, hogs would opportunistically eat birds, nestlings, reptiles, amphibians and small mammals.

Providing additional hunting in the new hunt zones proposed in the CCP is primarily for habitat management purposes. Wildlife biologists generally agree that any deer herd needs to be hunted to properly manage habitats and retain disease-free or otherwise healthy deer. Habitats subject to deer damage include forest under story and shrub habitat that migratory songbirds depend on for food resources. Heavily-browsed vegetation leaves less food and cover habitat for neotropical migratory birds. Reducing browse would also provide additional food and cover for species such as small mammals, reptiles and invertebrates.

Due to the rise in development, deer populations have encroached on residential areas as well as damage crops from local farmers who live adjacent to the Refuge property. Providing a hunt will support one of the “Big 6” activities in the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57) and, if compatible, is to receive enhanced consideration in refuge planning. Controlled hunting keeps the deer population within a healthy carrying capacity of the habitat.

AVAILABILITY OF RESOURCES:

Back Bay NWR incurs the bulk of the cost for implementing the hunt program in staff time to administer the hunt each day and to coordinate with our partners. Staff costs have been reduced greatly since partnering with VDGIF to administer the lottery process, which is no cost to the Refuge. To expand hunting to the new zones proposed in the CCP, there will be start-up costs to clear parking areas and post signs; however, this cost (included below) is within the existing budget and staff resources of the Refuge. Costs associated with administering this use include:

- Senior Refuge Biologist (GS-12) and/or GS-09 Refuge Biologist - 6 weeks/yr. = **\$9,600**
- Visitor Services Manager (GS-12) and/or GS-09 Refuge Operations Specialist – 6 weeks/yr. = **\$9,600**
- Deputy Refuge Manager (GS-13) – 1 week/yr. = **\$1,875**
- Refuge Manager (GS-14) - 1 week/yr. = **\$2,088**

- Law Enforcement Officer (GS-09) - 1.5 weeks/yr. = **\$1,575**
- Maintenance Worker (WG-10) - 3 weeks at start-up of new hunt zones = **\$2,850**;
1 week/yr. thereafter = **\$950**

In addition volunteer hours ranging from 50 to 60 hours contributing approximately \$1,000.00.

Anticipated Impacts of the Use: The purposes of the Refuge is to provide habitat for migrating wintering waterfowl, particularly greater snow geese, to protect wetlands, preserve habitat for water birds, and improve water quality in Back Bay. Conducting the hunt will not impact waterfowl use of the high quality habitat found in the impoundments or adjacent marshes. Populations of most migratory birds are low at this time of the year. Some disturbance occurs to waterfowl, but it is offset by the benefits of a healthy deer herd that is smaller and is not consuming large quantities of waterfowl food plants. Disturbance to endangered species has not been noted at the refuge. A Section 7 consultation was prepared and approved on the hunt program in 1985.

Habitats subject to deer damage include forest under story and shrub habitat that migratory songbirds depend on for food resources. Heavily-browsed vegetation leaves less food and cover habitat for neotropical migratory birds, a trust resource which the Refuge is charged with protecting. Controlled hunting keeps the deer population within the carrying capacity of the habitat.

Modifying the hunt program to further reduce the deer population would then reduce the browse effects on vegetation. This would enable the forest understory to grow and produce more food and cover for neotropical migrants. It would also provide additional food and cover for species such as small mammals, reptiles and invertebrates.

Some wildlife disturbance and trampling of vegetation would occur from deer and hog hunters walking around in their zones. During the hunt, the Refuge is completely closed to public use. This causes some conflicts with other users; however, benefits are greater by keeping a healthy deer population. Expansion of the hunt would increase the time some visitors would be unable to use the refuge, although the losses of these visitors during some days from October to December may be offset by increased visitation with hunters. Shotgun noise from hunting could cause some wildlife disturbance. Hunting provides game meat and recreation for hunters. Hunters who come from outside the local area may contribute to the local economy by staying at local hotels and eating in local restaurants.

PUBLIC REVIEW AND COMMENT:

As part of the CCP process for Back Bay NWR this compatibility determination will undergo extensive public review, including a comment period of 30 days following the release of the Draft CCP/EA.

DETERMINATION (CHECK ONE BELOW):

Use is Not Compatible

Use is Compatible With the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

The hunt program would be managed in accordance with Federal and State regulations. The deer hunt would be reviewed annually to ensure deer management goals are achieved. Both the deer and feral hog hunts would be reviewed annually to ensure the program is providing a safe, high quality hunting experience for participants. The Annual Hunt Plan must be approved by Regional Office supervisors. Hunt season dates, limits and/or number of hunters per day would be adjusted as needed to achieve balanced wildlife population levels within carrying capacities.

To mitigate user conflicts that arise when we close the Refuge to other public use, we would issue news releases and post information at the Visitor Center to notify visitors of closings. We maintain safe deer and feral hog hunts by limiting the number of hunters per zone and by establishing a buffer zone around Refuge residence buildings.

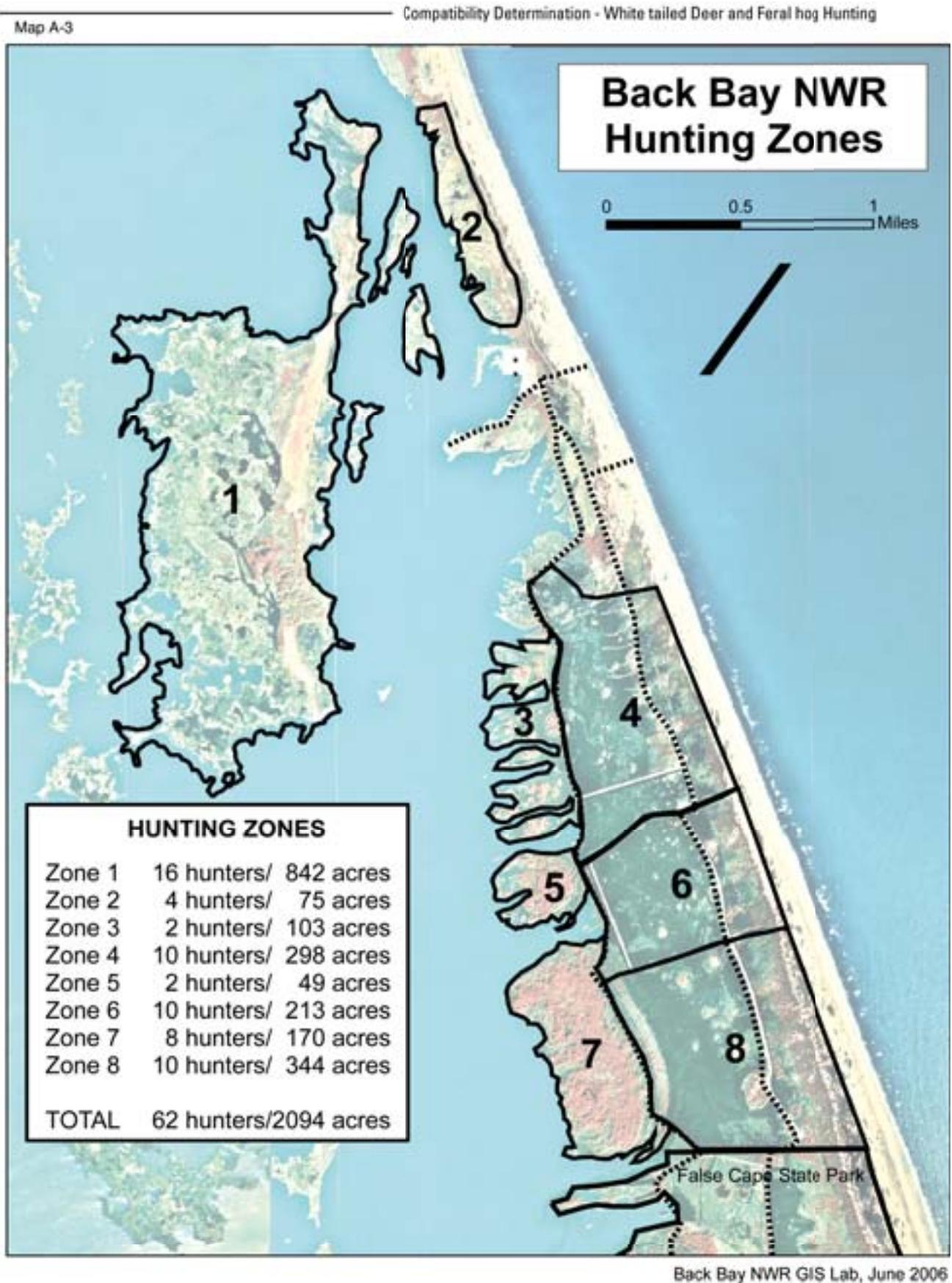
JUSTIFICATION:

Hunting is a wildlife-dependent priority public use with minimal impact on Refuge resources. Hunting is consistent with current Service policy on hunting, the National Wildlife Refuge System Improvement Act of 1997, and the broad management objectives of the National Wildlife Refuge System. Hunting will not materially interfere with or detract from the purposes of the refuge or the mission of the National Wildlife Refuge System. The Refuge currently is meeting deer management and visitor services objectives on the barrier spit by providing this hunt. Hunting in new zones is needed to meet those same objectives on other areas of the Refuge. This use has been determined to be compatible provided the stipulations necessary to ensure compatibility are implemented, and the use does not exceed thresholds necessary for visitor safety and resource protection.

Signature: Refuge Manager _____
(Signature and Date)

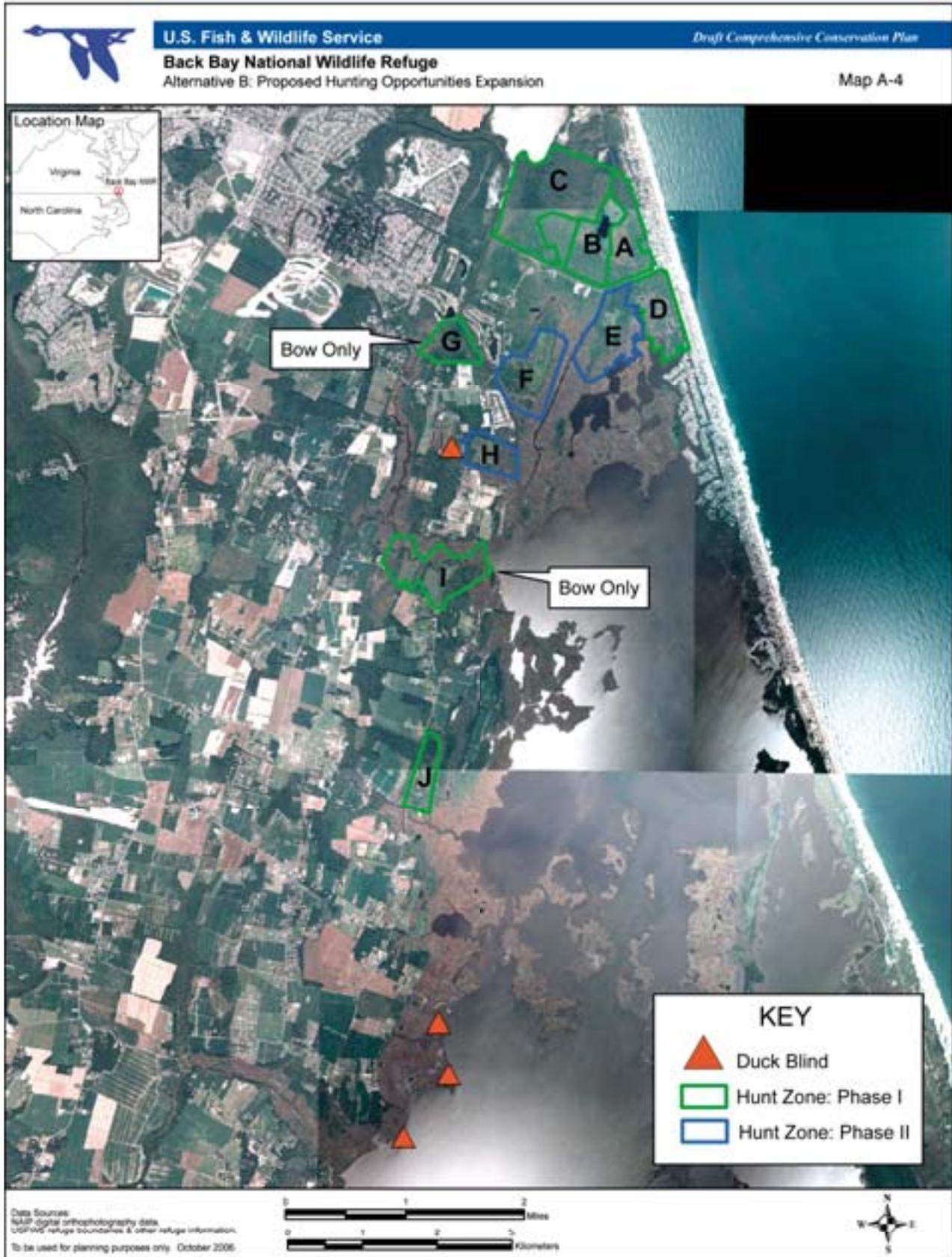
Concurrence: Regional Chief _____
(Signature and Date)

Mandatory 15-year re-evaluation date: _____
(Date)



Draft Comprehensive Conservation Plan & Environmental Assessment

Appendix A: Findings of Appropriateness and Compatibility Determinations



COMPATIBILITY DETERMINATION

USE: Waterfowl Hunting

REFUGE NAME: Back Bay National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITIES

Executive Order No. 7907 dated June 6, 1938; Migratory Bird Conservation Act (16 USC 715-715r); Emergency Wetlands Resources Act (100 Stat. 3582-91).

National Wildlife Refuge System Administration Act of 1996, as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 6688dd, et seq.)

REFUGE PURPOSES

- “...as a refuge and breeding ground for migratory birds and other wildlife” (E.O. 7907).
- “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (16 U.S.C. 715d, Migratory Bird Treaty Act).
- “... the conservation of wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” (16 U.S. C. 3901b. 100 Stat. 3583, Emergency Wetlands Resources Act).

NATIONAL WILDLIFE REFUGE SYSTEM MISSION

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Pub. L. 105–57; 111 Stat. 1252)

DESCRIPTION OF USE

(a) What is this use? Is it a priority public use?

The use is waterfowl hunting. Waterfowl hunting is a priority public use of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997.

(b) Where would the use be conducted?

We propose a waterfowl hunting program in two areas within the Refuge. One waterfowl hunting area is Redhead Bay, located south of the Presidential Proclamation area. We propose three sites within this area, located on Back Bay at Tracts 229, 217, and 214-I. The second waterfowl hunting area is the Frank Carter impoundment on Colchester Road (Map A-5). We also will provide support for a waterfowl hunt at False Cape State Park by providing parking on the Refuge.

(c) When would the use be conducted?

Waterfowl hunting opportunities in Redhead Bay would be allowed Opening Day, Monday, Wednesday, Saturday, and some holidays during the State-designated seasons. Actual season dates change annually, but typically run from September through March. This schedule coincides with the existing State-administered waterfowl hunting program on Back Bay (Attachment A.1). At the Frank Carter impoundment, an annual one-day, youth waterfowl hunt will occur on the State-designated date within the season. Hunting will be allowed from 1/2 hour before sunrise until 1:00p.m.; except during the snow goose season, which is until sunset, and unless safety or overriding resource concerns would make hunting incompatible.

(d) How would the use be conducted?

This hunting program will be administered according to State, Federal, and Refuge regulations. At Redhead Bay, the three locations will be designated by a ground stake that will accommodate temporary (i.e. float/boat) waterfowl hunting blinds. The youth hunt at the Carter impoundment would involve constructing one stationary blind for hunters. These hunt blind locations will be incorporated into the managed/quota waterfowl hunt programs administered by the VA Department of Game and Inland Fisheries (VDGIF). See attachment A.1 for specific information on their programs. Hunters will register to hunt these blinds through VDGIF and receive a selection notice permitting them to hunt these areas. Hunters will be allowed a specified number of companions (2 to 4). Law enforcement personnel will conduct official checks to ensure compliance with all regulations.

Dogs would be allowed during waterfowl hunts for retrieval purposes to reduce crippling loss.

(e) Why is this use being proposed?

There is a tremendous amount of waterfowl hunting history in Back Bay; however, waterfowl hunting was prohibited on the original Refuge boundary by Presidential Proclamation in 1939. Hunting is a priority public use under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997. This use is being proposed because it provides new and additional public use opportunities on the Refuge without conflicting with the Refuge purpose.

AVAILABILITY OF RESOURCES

Implementing this proposed hunt program is within the resources available in our station budget because our partner agency, VDGIF, will be administering the majority of the program. Refuge staff will coordinate and participate in interagency meetings to establish the program and assist in constructing the stationary blind at the Carter impoundment. Conducting compliance checks is within the regular duties of the Station Law Enforcement Officer. Anticipated start-up and annual costs are as follows:

- Senior Refuge Biologist (GS-12) and/or GS-09 Refuge Biologist (coordinate with State, assist implementation, etc.) - 1 week start-up = **\$1,600**; 2 days/yr. after start-up = **\$650**
- Visitor Services Manager (GS-12) and/or GS-09 Refuge Operations Specialist (coordinate with State, assist with implementation, web site, etc.) - 1 week start-up = **\$1,600**; 2 days/yr. after start-up = **\$650**
- Deputy Refuge Manager (GS-13) (review proposals, budgeting, housing and vehicle coordination, etc.) - 2 days start-up = **\$750**
- Refuge Manager (GS-14) (coordination, etc.) - 2 days start-up = **\$830**
- Maintenance Worker (WG-09) (construct and maintain blind) - 2 weeks start-up = **\$1,900** startup; 1 week/yr. after start-up = **\$950**
- Law Enforcement Officer (GS-09) (enforcement patrols) 2 weeks/yr. = **\$2,100**

ANTICIPATED IMPACTS OF THE USE

There will be minimal trampling of emergent vegetation and bottom substrates in and around the blinds. Unethical hunters pose the risk of increased litter, and could cut vegetation to make blinds and pollute waters by shooting unapproved lead shot. There would be no significant impact on waterfowl population levels, as sustainable harvest rates are pre-determined by Federal law. Dogs allowed for retrieval purposes to reduce crippling loss would be under the control of the hunter, thus reducing the chance to injure or harass non-target wildlife species, and would therefore not diminish the quality of experience for other visitors or hunters. At the Carter impoundments, this use may pose a conflict with adjacent landowners due to early morning gunfire.

Duck hunting has the potential of impacting other waterfowl, shore birds, marsh birds, and other migratory bird populations feeding and and/or resting near the designated area(s). Human disturbance to migratory birds has been documented in many different locations. The presence of hunters will decrease nesting behavior and increase alert and escape behavior for some of these various species.

Under the proposed action, Back Bay NWR estimates a maximum additional 30-45 ducks, and 15-25 geese will be harvested each year. This harvest impact represents less than one-tenth of a percent of Virginia's average harvest. Liberal duck seasons (75 days, 5 bird bag limit) and resident goose seasons have resulted in high waterfowl harvests in Virginia during the past several years. Harvest has averaged ~150,000 ducks and ~60,000 geese from 2000 - 2005, compared to 115,000 ducks and 25,000 geese during the 1990's (USFWS. 2007. Migratory bird hunting activity and harvest during the 2005 and 2006 hunting seasons: Preliminary estimates. <http://www.fws.gov/migratorybirds/reports/reports.html>). The long season length and liberal bags offer greater opportunity and a greater cumulative harvest over the course of the season.

Opening Refuge lands to public use can often result in littering, vandalism, or other illegal activities on the Refuge. Focused law enforcement patrols during hunting season will help to mitigate this possibility.

The positive impact would be providing additional hunting opportunities, especially to youth hunters, and for the first time for waterfowl hunters.

Impacts may be minor when we consider them alone, but may be important when we consider them collectively. Our principal concern is repeated disruption of nesting, resting, or foraging birds, and public safety concerns related to firearms use when hunting. Our knowledge and observations of the affected area(s), and of properly managed hunting activity shows no evidence that this activity will adversely affect the wildlife resource. Although we do not expect substantial cumulative impact from this activity in the near term, it will be important for the Refuge staff to monitor this use, and, if necessary, respond appropriately to conserve high quality wildlife resources.

PUBLIC REVIEW AND COMMENT

As part of the CCP process for Back Bay NWR this compatibility determination will undergo extensive public review, including a comment period of 30 days following the release of the Draft CCP/EA.

DETERMINATION (CHECK ONE BELOW):

Use is Not Compatible

Use is Compatible With the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY

All Federal, State, and Refuge regulations must be followed by all hunters. This waterfowl hunting opportunity is only compatible if administered in cooperation with VDGIF because the Refuge does not have the staff to administer the program alone.

JUSTIFICATION

Hunting is a priority public use. Waterfowl hunting has not been allowed on Back Bay NWR because of Presidential Proclamation in 1939, one year after the Refuge was established. With additional bay-front property acquired, outside the Proclamation Boundary, providing waterfowl hunting opportunities is now possible. VDGIF is very supportive of this proposal and will administer 90% of the program. This activity will not materially interfere with or detract from the mission of the NWRS or purposes for which Back Bay NWR was established. This use has been determined to be compatible provided the stipulations necessary to ensure compatibility are implemented, and the use does not exceed thresholds necessary for visitor safety and resource protection.

Signature: Refuge Manager _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

Mandatory 15-year re-evaluation date: _____
(Date)

ATTACHMENT A.1

Draft Virginia Department of Game and Inland Fisheries Waterfowl Hunting Programs (with edits to include Back Bay NWR)

<http://www.dgif.virginia.gov/hunting/managedhunts/>

Princess Anne WMA Float Blind September Canada Goose/Teal Hunts and October Waterfowl

Hunt September Canada geese/teal and waterfowl (during the October waterfowl season) on the designated waters of Back Bay in Virginia Beach. The area's 51 float blind stakes are available to float blind hunters on a first come, first served. Hunters are not allowed to tie float blinds to stakes before 5:00 AM. Half-day (until 1:00 PM) hunting allowed on Opening Day, Mondays, Wednesdays, Saturdays and State Holidays. It is recommended that each hunting party visit the hunting area prior to the season to locate boat access, blind stakes, and scout the area in general. You must be familiar with the area to locate the blind stakes before shooting time. Dogs are allowed and recommended.

- **Hunt days:** Opening Day, Mondays, Wednesdays, Saturdays and State Holidays.
- **Hunt dates:** Refer to above web site for specific hunt dates.
- Hunters may not tie up to blind stakes until 5:00 AM.

Princess Anne WMA Late Snow Goose Hunts

This is an opportunity for float blind hunters to hunt snow geese on the designated waters of Back Bay after the general duck season. The blind stakes in Back Bay are available for snow goose hunting after the general duck season. These hunts will be permitted after the general duck season and will be on a first come, first served basis. Daily hunting times will be ½ hour before sunrise to sunset.

- **Season dates:** Refer to above web site for specific hunt dates.

Back Bay NWR - Youth Waterfowl Day

This is an opportunity for youth to hunt waterfowl at the Carter Impoundment on Back Bay NWR. The Service, in cooperation with VDGIF, will host a youth waterfowl hunting day annually during the month of October. Only youths may hunt and carry a firearm, and must be accompanied by a legal guardian. All youth hunters are to be registered for this event. To register, contact Back Bay NWR at 757-721-2412. There are no decoys provided for these hunts. Dogs are allowed and recommended for retrieval purposes.

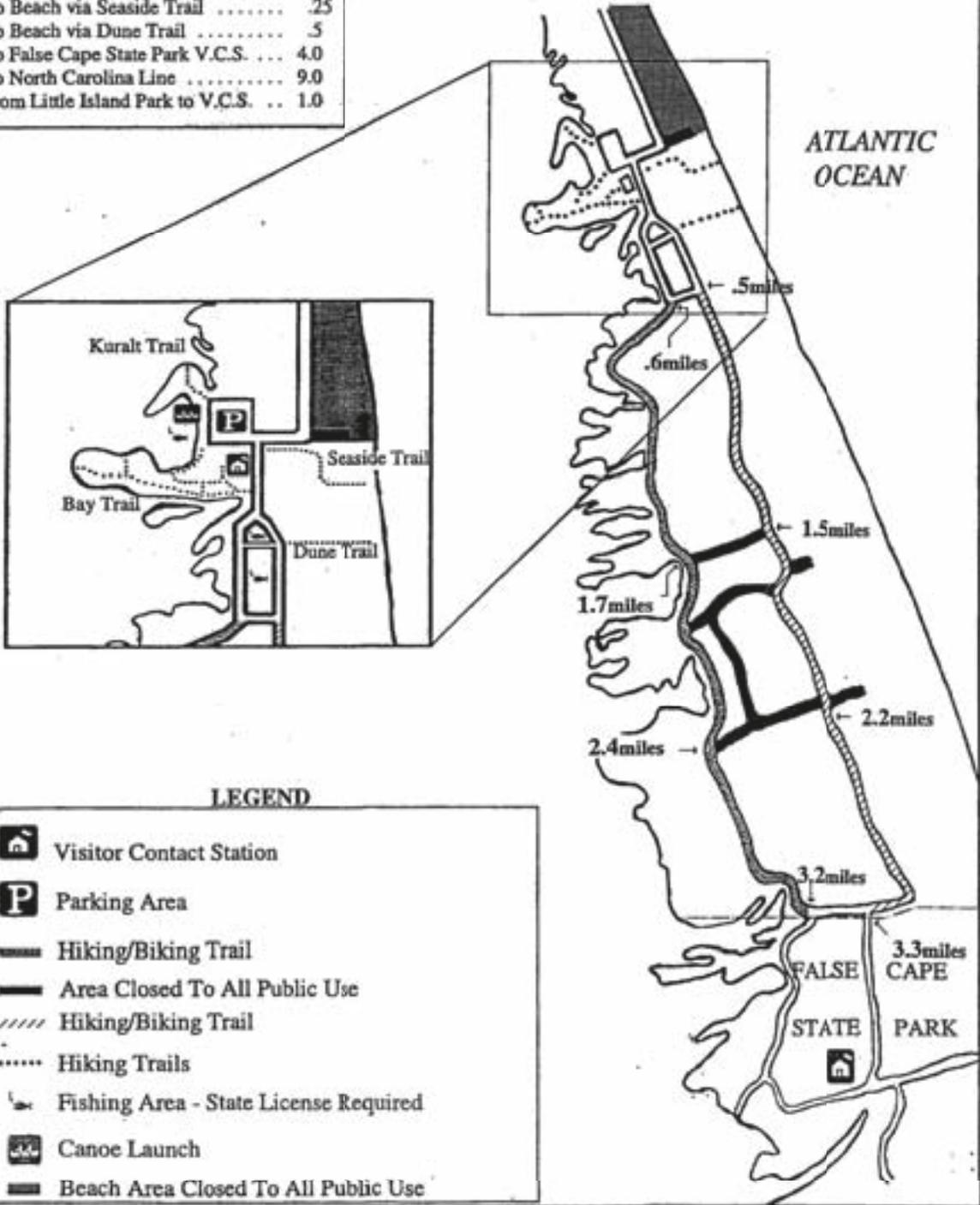
Appendix A: Findings of Appropriateness and Compatibility Determinations

Back Bay National Wildlife Refuge

Map A-5

One-way Mileage from V.C.S.

End of Bay Trail	4
To Beach via Seaside Trail25
To Beach via Dune Trail5
To False Cape State Park V.C.S.	4.0
To North Carolina Line	9.0
From Little Island Park to V.C.S. ..	1.0



Back Bay National Wildlife Refuge

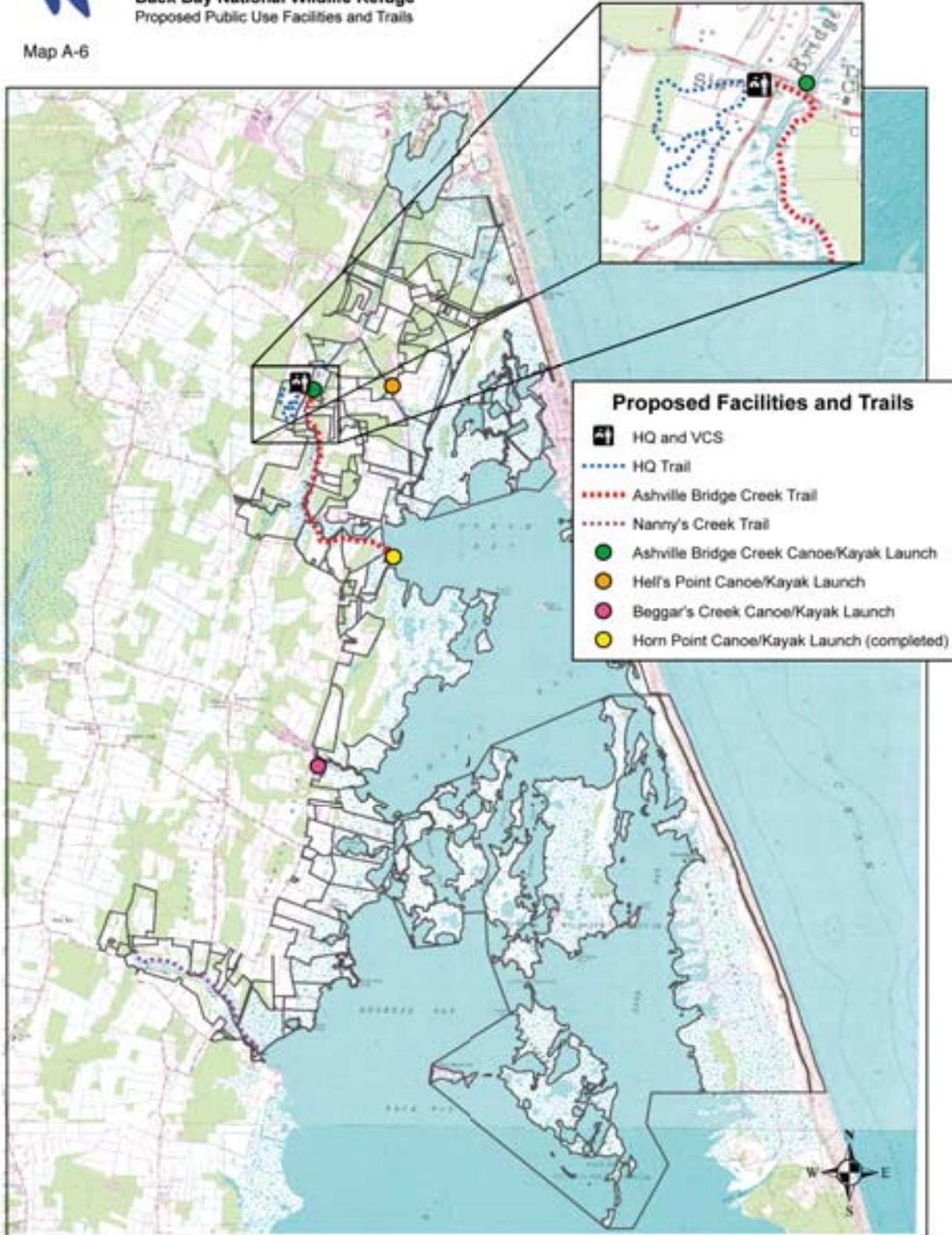
Compatibility Determination - Operation of Visitor Contact Station and Public Parking



Back Bay National Wildlife Refuge
Proposed Public Use Facilities and Trails

Draft Comprehensive Conservation Plan

Map A-6



Map Source:
USFWS LPRU data
USFWS refuge boundaries & other refuge information.
To be used for planning purposes only. December 2006.

Back Bay NWRP GIS Lab, December 2006

Draft Comprehensive Conservation Plan & Environmental Assessment

COMPATIBILITY DETERMINATION

USE: Freshwater and Saltwater Fishing and Crabbing

REFUGE NAME: Back Bay National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITIES

Executive Order No. 7907 dated June 6, 1938; Migratory Bird Conservation Act (16 USC 715-715r); Emergency Wetlands Resources Act (100 Stat. 3582-91).

National Wildlife Refuge System Administration Act of 1996, as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 6688dd, et seq.)

REFUGE PURPOSES

- “...as a refuge and breeding ground for migratory birds and other wildlife” (E.O. 7907).
- “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (16 U.S.C. 715d, Migratory Bird Treaty Act).
- “... The conservation of wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” (16 U.S. C. 3901b. 100 Stat. 3583, Emergency Wetlands Resources Act).

NATIONAL WILDLIFE REFUGE SYSTEM MISSION

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Pub. L. 105–57; 111 Stat. 1252)

DESCRIPTION OF USE

(a) What is this use? Is it a priority public use?

The use is fresh and saltwater fishing and crabbing, which is a priority public use of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997.

(b) Where would the use be conducted?

Fishing and crabbing occurs on the Refuge at the designated fishing area in Back Bay, which is in front (west) of the headquarters, along the beach (excluding the North Mile closure area), and in D Pool.

Fishing will be permitted at the Horn Point Canoe/Kayak Launch Site, located on Horn Point Road, on the west side of Back Bay. In addition, future lands acquired and deemed appropriate for recreational fishing will be evaluated for compatibility by amending this determination.

Fishing/Crabbing is prohibited in the Refuge impoundments south of the maintenance compound, from the dikes into Back Bay in that same area, and from any other Refuge property.

(c) When would the use be conducted?

The Refuge is open to public fishing/crabbing in the above designated area, including the future Horn Point site, during standard Refuge hours of one-half hour before sunrise to one-half hour after sunset. The Refuge also participates and promotes two “Kids Fishing Days Events” annually; one in April and one on the first Saturday in June to support National Fishing and Boating Week.

The Refuge is proposing to allow individuals to night-time surf fish on the beach, under a Special Use Permit. Although select weeks would be permitted, this use would be restricted to the months of October through February. All participants would be required to enter the Refuge prior to closure of the entrance gate, around sunset, and hours of fishing will also be restricted in accordance with available staff resources (proposed until 12:00 midnight or 2:00 a.m.). Night-time surf fishing will not be allowed unless and until the Refuge’s current access regulations as expressed in 50 CFR 26.34 are changed to permit such access.

This use will not be allowed unless and until the Refuge’s current access regulations as expressed in 50 CFR 26.34 are changed.

(d) How would the use be conducted?

Visitors are free to fish/crab in designated areas as this activity is deemed wildlife oriented and is promoted within the U.S. Fish and Wildlife Service, nationwide. Visitors are required by Virginia regulations to maintain a current fishing license (unless exempt), except for the “Virginia Free Fishing Weekend,” and follow all Virginia fishing/crabbing regulations. The Refuge may impose stricter regulations as deemed necessary to maintain fish populations on Refuge lands.

While the Refuge allows fish to be removed from these areas, catch and release is promoted by many of the fisherman using these areas. Visitors would supply their own fishing/crabbing gear, bait, and access to the open areas. The special Kids Fishing Day events are administered in cooperation with the State of Virginia, the local chapter of the Izaak Walton League and other local vendors.

The night-time surf fishing activity will be controlled through conditions listed on a required Special Use Permit and through strict enforcement by Refuge staff. Each individual will purchase a permit for this use and produce it upon request when participating in this use. For safety purposes, only individuals 16 years of age and older can obtain a permit. Applicants under 18 shall have a legal parent or guardian apply for and sign the permit. Participants shall adhere to safety precautions outlined in the permit, particularly the use of a reflective vest or other suitable reflective material to be worn above the waist. Permittees of the beach Motor Vehicle Access Permit Program shall have priority use on the beach. Permits are subject to revocation for violation of the terms of the permit.

(e) Why is this use being proposed?

Fishing and crabbing is a current use on the Refuge and is an appropriate activity. Refuge expenses are very minimal aside from already existing standard law enforcement patrols to verify regulations are being followed. Also, our fishing events promote this wise use through environmental education and interpretation. This use supports wildlife dependent recreation as outlined in the Improvement Act.

Service policy (605 FW 3.6(G)) requires that if a Refuge is not generally open after sunset, the decision to allow night fishing must be based on specific refuge objectives and not just on historic use. Goal 6 of the Draft CCP/EA is to “provide and expand hunting and fishing opportunities to the public where compatible with Refuge purposes” and a stated objective in the Service-preferred alternative expresses that “within 5-7 years of CCP approval, expand high-quality fishing opportunities on the Refuge.” Allowing night time surf fishing under the conditions specified above would increase high-quality fishing opportunities for the public and thereby help meet Refuge objectives.

AVAILABILITY OF RESOURCES

Permitting the general fishing/crabbing use is within the resources available to administer our Visitor Services Program. The funding received by the Refuge is adequate to continue to administer this program and to ensure that the use remains compatible with the Refuge purposes. The use of the area specified for fishing is a small area, where cost effective administration of the program can occur. Compliance with fishing regulations is handled within the regular duties of the Station Law Enforcement Officer. Anticipated additional costs for special fishing events:

- Senior Refuge Biologist (GS-12) and/or GS-09 Refuge Biologist (review request) - 1/2 day/yr. = **\$175**
- Visitor Services Manager (GS-12) and/or GS-09 Refuge Operations Specialist (coordinate with entity, process) - 2 days/yr. = **\$650**
- Refuge Manager (GS-14) (review and approval) – 1/4 day/yr. = **\$104**
- Law Enforcement Officer (GS-09) (enforcement patrols) 1 day/yr. = **\$208**

Implementing the night-time surf fishing will require additional resources, due to being highly managed. Back Bay NWR incurs the bulk of the cost in staff time to administer the use each day; however, this cost (included below) will be offset by each \$35 use fee generated by this Program. Costs associated with administering night-time surf fishing include:

- Visitor Services Manager (GS-12) and/or GS-09 Refuge Operations Specialist – 4 weeks/yr. = **\$6,400**
- Deputy Refuge Manager (GS-13) – 1 week/yr. = **\$1,875**
- Refuge Manager (GS-14) - 1 week/yr. = **\$2,088**
- Law Enforcement Officer (GS-09) - 4 weeks/yr. = **\$4,200**
- Administrative Assistant (GS-06) – 1 week/yr. = **\$900**

ANTICIPATED IMPACTS OF THE USE

While the day-to-day activity of fishing/crabbing is considered a consumptive use on the Refuge, there are still few adverse impacts from the use. While some fish/crabs are lost to the system, they are renewable resources that will be replenished. Additionally, it has been found the majority of people fishing in D Pool are catch and release fisherman. There is no significant impact on migratory birds due to the small number of fish that are removed from the Refuge through the public fishing program, and while fishing may cause other wildlife disturbances, these impacts are minimal and temporary.

Allowing night-time surf fishing could potentially impact migratory shore birds and nesting sea turtles. These impacts have been reduced for shorebirds and eliminated for sea turtles by restricting this use to periods outside the peak migration and nesting seasons, respectively. There is the possibility of increased disturbance to dune habitats; however, regular patrols and enforcement of this closed area will be implemented. No other adverse impacts are anticipated.

PUBLIC REVIEW AND COMMENT

A public notice of availability was issued soliciting public review and comment for 14 days. It was sent to the Virginia Pilot local newspaper, posted in the Visitor Contact Station, and submitted to various fishing interest groups. Four responses were received, all in support of the proposed fishing program.

In addition, the Refuge held a public meeting on the proposed night fishing activity on January 31, 2007. Further written comments were accepted until March 2, 2007. Forty-five (45) written comments were received with 37 in support of the new activity and five opposing. Comments from the opposing public include: the activity will interfere with the primary purpose of the Refuge, will divert resources, and cause security issues (3); will cause night public use issues such as fires, alcohol, firearms, litter, and wildlife harassment (2); and, will threaten dune protection and cause habitat erosion. Limiting impacts from these issues are addressed above.

DETERMINATION (CHECK ONE BELOW):

Use is Not Compatible

Use is Compatible With the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY

Maintain closed areas which allow for migratory birds to still feed in closed impoundments. Do not allow motorized access for fishing except as designated for handicapped parking near D and E impoundments.

In addition to the above, the night-time surf fishing use will have many stipulations, including but not limited to:

- Each individual will purchase a permit for this use and produce it upon request when participating in this use.
- Only individuals 16 years of age and older can obtain a permit. Applicants under 18 shall have a legal parent or guardian apply for and sign the permit.
- Participants shall adhere to safety precautions outlined in the permit, particularly the use of a reflective vest, or other reflective item and lit lanterns.
- Permittees of the beach Motor Vehicle Access Permit Program shall have priority use on the beach.
- No dogs or other pets, alcohol, or campfires are permitted.
- All permittees must be actively fishing.

- No camping, cooking, tents, or any other structure except a beach chair.
- Distance from the surf line where participants can set up and fish will be stipulated in the Special Use Permit.
- Permits are subject to revocation for violation of the terms of the permit.

JUSTIFICATION

Fishing is an appropriate wildlife-dependent use of Refuge resources. It has been a long standing tradition in the Region, and while the Refuge does maintain areas open to public fishing and crabbing, it still maintains certain areas closed. These closed areas assist in providing the quality food source for migratory waterbirds that depend on the fish and crabs for survival.

The U.S. Fish and Wildlife Service and Back Bay National Wildlife Refuge promote fishing/crabbing as a viable wildlife oriented recreational activity. The Refuge also promotes this activity through two annual “Kids Fishing Day” events, which are in line with the environmental education and wildlife oriented recreational activities for today’s youth. These days provide an opportunity to educate the children in how to fish, provide for an opportunity to learn about nature, the Refuge system, and enhance ethical fish behavior at a young age. This activity can also build or strengthen a bond between friends and family and enhance both individual’s knowledge about the natural ecosystem provided and why it is important to protect them. Fishing opportunities, including nighttime surf fishing, will promote public appreciation and support for the refuge, and help achieve Refuge goals and objectives.

This use has been determined to be compatible provided the stipulations necessary to ensure compatibility are implemented, and the use does not exceed thresholds necessary for visitor safety and resource protection. We do not expect this use to materially interfere with or detract from the mission of the National Wildlife Refuge System, nor diminish the purposes for which the refuge was established. It will not pose significant adverse effects on Refuge resources, nor interfere with public use of the Refuge, nor cause an undue administrative burden.

Signature: Refuge Manager _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

Mandatory 15-year re-evaluation date: _____
(Date)

**FINDINGS OF APPROPRIATENESS AND COMPATIBILITY DETERMINATIONS FOR
THOSE SECONDARY USES FOUND TO BE APPROPRIATE**

- Operation of Visitor Contact Station and Public Parking
- Walking/Hiking
- Bicycling
- Launching of Non-Trailerred Vessels
- False Cape State Park Access (through Refuge)
- Biological Research
- Outdoor Events
- Ground Military, Police and Fire Training
- Commercial Filming/Photography
- Weddings and Other Ceremonies
- Parking and Connecting Access to Horseback Riding
- Cooperative Farming*
* *(this compatibility determination was approved on March 2, 2007)*

JUSTIFICATION FOR A FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Back Bay NWR

Use: Operation of Visitor Contact Station and Public Parking

NARRATIVE

Operation of the visitor contact station and public parking are a means to facilitate priority public uses of environmental education and interpretation (VCS operation), and wildlife observation and photography (parking). These uses directly support the mission of the FWS, NWRS and the Refuge, does not have negative impacts on the Refuge mission, and does not require additional resources to allow.

COMPATIBILITY DETERMINATION

USE: Operation of the Visitor Contact Station and Public Parking

REFUGE NAME: Back Bay National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITIES

Executive Order No. 7907 dated June 6, 1938; Migratory Bird Conservation Act (16 USC 715-715r); Emergency Wetlands Resources Act (100 Stat. 3582-91).

REFUGE PURPOSES

- “...as a refuge and breeding ground for migratory birds and other wildlife” (E.O. 7907).
- “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (16 U.S.C. 715d, Migratory Bird Treaty Act).
- “... the conservation of wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” (16 U.S. C. 3901b. 100 Stat. 3583, Emergency Wetlands Resources Act).

NATIONAL WILDLIFE REFUGE SYSTEM MISSION

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Pub. L. 105–57; 111 Stat. 1252)

DESCRIPTION OF USE

(a) What is this use? Is it a priority public use?

The uses are operation of the Visitor Contact Station (VCS) and public parking. VCS operation supports and provides opportunities for priority public uses (environmental education and interpretation), as identified in the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997. Although vehicle parking in designated areas is not a priority public use, this activity also facilitates priority public use opportunities (wildlife observation and photography).

(b) Where would the use be conducted?

Refuge Barrier Spit (Northern/Public Use Zone) (Map A-6): This developed area comprises approximately 280 acres, and serves more than 110,000 visitors annually. This area includes a Visitor Contact Station (VCS) with 50-car visitor parking lot and wildlife viewing scopes, a canoe/kayak launch, and a fee collection station at the Refuge entrance. Future plans include relocation of the Refuge entrance station and additional parking at the entrance area for approximately 20 cars.

Refuge West Side (Map A-7): The Asheville Bridge Creek Environmental Education Center (ABCEEC) is a 1,800 square foot converted home on a 17-acre parcel that hosts group visitors on an appointment basis. It provides environmental education, interpretation, and parking for the indoor and outdoor classroom activities. The Horn Point Canoe/Kayak Launch Facility provides public parking for launching canoes/kayaks and for wildlife observation and photography. There is a parking area at the Frank Carter Impoundment on Colchester Road, which supports pedestrian activities.

We have future plans to construct a new Refuge Headquarters and Visitor Contact Station (HQ/VCS) on Tract #244 at the corner of Sandbridge Road and New Bridge Road; two thoroughfares that bisect the Refuge. The new facility will be a standard, medium-sized design of approximately 10,500 square feet. Located here will be a maximum 100-car parking lot. The facility will provide environmental education, interpretation, and interior and exterior interpretive displays. This proposed public use area comprises approximately 61.5 acres, and is expected to serve more than 150,000 visitors annually. Once the new facility is constructed, we also propose to convert a Refuge house (Tract #135) into an environmental education center and utilize the existing ABCEEC as a maintenance facility.

Three additional canoe/kayak launch sites are planned to be constructed on the west side, which will provide public parking to also facilitate wildlife observation and photography (Map A-7). These new sites are discussed in detail in a separate Compatibility Determination (see Boat Launching).

(c) When would the use be conducted?

Refuge Barrier Spit (Northern/Public Use Zone): Currently the VCS is open seven days per week from April 1 through October 31, and closed on Saturday between November 1 and March 31. Public parking will be allowed year-round, one-half hour before sunrise to one-half hour after sunset. A temporary closure to these activities would be implemented during any scheduled Refuge hunt dates.

In the Draft Comprehensive Conservation Plan we propose to change the hours of operation at the Visitor Contact Station; to be closed on Sunday instead of Saturday between November 1 and March 31. There are no proposed changes to the hours of operation from April 1 through October 31.

Refuge West Side: The ABCEEC site is for educational and other organized group visits, by reservation only, for the purpose of environmental education, wildlife viewing, and wildlife photography. Vehicle parking for pedestrian activities at the ABCEEC and the Frank Carter impoundment area are open year-round from one-half hour before sunrise to one-half hour after sunset. The Horn Point Canoe/Kayak Launch Site will be open from April 1 through October 31 annually, from one-half hour before sunrise to one-half hour after sunset. The new HQ/VCS on Tract #244 will follow the newly proposed hours of operation; seven days per week from April 1 through October 31 and closed on Sunday instead of Saturday between November 1 and March 31. The newly converted environmental education center on Tract #135 will operate the same as the current ABCEEC. Facilities on the west side would remain open during hunts, as they are not located near any hunt zones.

(d) How would the use be conducted?

We would conduct these uses much as we conduct them presently. Such activities would be allowed in areas and in buildings that have been designed to accommodate such uses. These uses would be conducted for the general public, as well as for organized groups, including schools and scout groups. Groups of 10 or more will be required to have permission to visit the Refuge for these activities, and a seasonal entrance fee from April 1 through October 31 will be charged to all, with the exception of canoe/kayak launches, the Frank Carter impoundment area, and for school groups, scouts on merit badge projects assignments, or children under 16 years of age. As currently exists, there will be a mix of personal and non-personal program delivery, including interpretive signing, audio-visual presentations, brochures, special events, guided walks and talks, exhibits, web site information, and informal visitor information contacts.

(e) Why is the use being proposed?

Vehicle parking facilitates use for participating in priority public uses. Public vehicle access is limited to the roads and parking areas that have been developed at the specific sites identified above. Future road and parking areas will be designed to maximize resource protection, while providing safe and convenient access to the visitor center. Creation of additional parking at the entrance station will accommodate parking for visitors or the public to observe wildlife and photograph. These visitors are often hikers and bikers.

AVAILABILITY OF RESOURCES:

The resources necessary to provide and administer these uses, at current use levels, is available within current and anticipated Refuge budgets. Staff time associated with administering this use is related to assessing and conducting parking and VCS maintenance, including kiosks, gates and signs, monitoring potential impacts of the use on Refuge resources and visitors, and providing information to the public about the use.

The Visitor Services Manager is available for public outreach. A Park Ranger will monitor visitor use and user interactions. The Park Ranger will conduct law enforcement activities to provide for visitor safety and resource protection. Maintenance staff performs the regular maintenance and repairs.

ANTICIPATED IMPACTS OF THE USE:

The presence of humans and cars has the potential of impacting shorebird, waterfowl, marshbirds and other migratory bird populations feeding and resting near the trails and on beaches during certain times of the year. Disturbing wildlife typically results in a temporary displacement without long-term effects on wildlife individuals or populations. Some species will avoid the areas people frequent, such as the parking areas and the buildings, while others seem unaffected by or even drawn to the presence of humans. Overall, those effects should not be significant.

Opening Refuge lands to this public use can often result in littering, vandalism, or other illegal activities. Our knowledge and observations of the affected areas show no evidence that these uses cumulatively will adversely affect the wildlife resource. Although we do not expect substantial impact from these uses in the near term, it will be important for Refuge staff to monitor those uses and, if necessary, respond to conserve high-quality wildlife resources.

Future parking at the newly proposed headquarters/visitor contact station site will be accomplished on a previously disturbed agricultural site. Creating additional parking at the entrance station will occur in an area that has already been developed primarily to accommodate priority public uses. Therefore, little wildlife value will be lost due to newly proposed construction projects.

PUBLIC REVIEW AND COMMENT:

As part of the CCP process for Back Bay NWR this compatibility determination will undergo extensive public review, including a comment period of 30 days following the release of the Draft CCP/EA.

DETERMINATION (CHECK ONE BELOW):

Use is Not Compatible

Use is Compatible With the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

No off-road or off-trail access will be permitted, except for emergency or administrative purposes, for the current motor vehicle access permit program for North Carolina residents, and for hunters.

Groups of 10 or more will be required to have permission to visit the Refuge for these activities, and a seasonal entrance fee from April 1 through October 31 will be charged to all, with the exception of school groups, scouts on merit badge projects assignments, or children under 16 years of age.

JUSTIFICATION:

These uses will provide compatible educational and recreational opportunities for visitors to enjoy Refuge resources, and improve their understanding and appreciation of fish and wildlife, ecology, refuge management practices, and the relationship of plant and animal populations in the ecosystem. Refuge visitors will better understand the Service’s role in conservation, and opportunities, issues, and concerns faced in management of our natural resources. Further, they will understand the impact that human presence, disturbance, and/or consumption can cause to these resources. Likewise, these uses will provide opportunities for visitors to observe wildlife habitats firsthand, and learn about wildlife and wild lands at their own pace in an unstructured environment. Authorization of these uses will result in a greater constituency for achieving Refuge goals, and, ultimately, the Service mission.

This use has been determined to be compatible provided the stipulations necessary to ensure compatibility are implemented, and the use does not exceed thresholds necessary for visitor safety and resource protection. We do not expect this use to materially interfere with or detract from the mission of the National Wildlife Refuge System, nor diminish the purposes for which the refuge was established. It will not pose significant adverse effects on Refuge resources, nor interfere with public use of the Refuge, nor cause an undue administrative burden.

Signature: Refuge Manager _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

Mandatory 10-year re-evaluation date: _____
(Date)

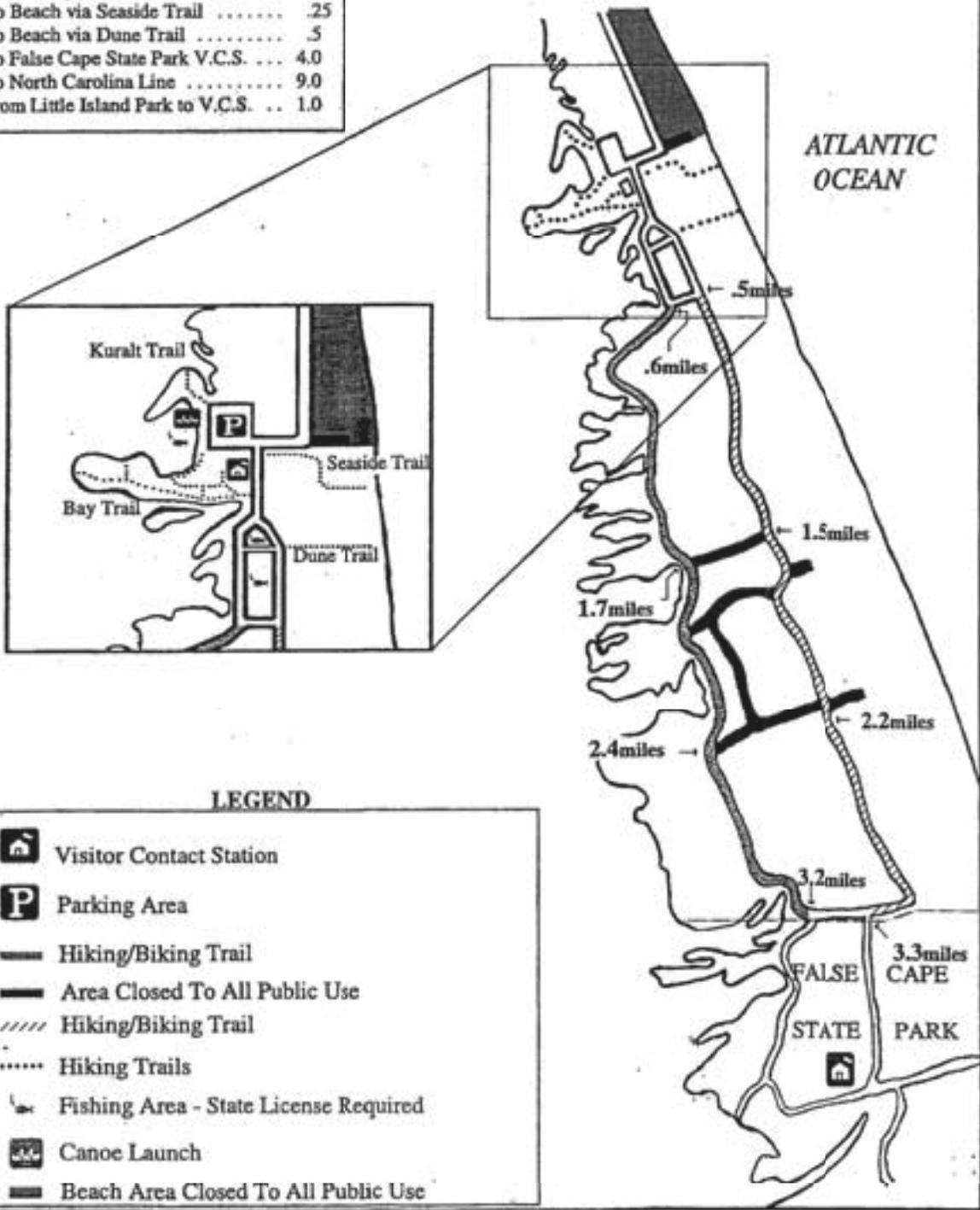
Appendix A: Findings of Appropriateness and Compatibility Determinations

Map A-7

Back Bay National Wildlife Refuge

One-way Mileage from V.C.S.

End of Bay Trail	.4
To Beach via Seaside Trail	.25
To Beach via Dune Trail	.5
To False Cape State Park V.C.S.	4.0
To North Carolina Line	9.0
From Little Island Park to V.C.S.	1.0



LEGEND

	Visitor Contact Station
	Parking Area
	Hiking/Biking Trail
	Area Closed To All Public Use
	Hiking/Biking Trail
	Hiking Trails
	Fishing Area - State License Required
	Canoe Launch
	Beach Area Closed To All Public Use

Back Bay National Wildlife Refuge

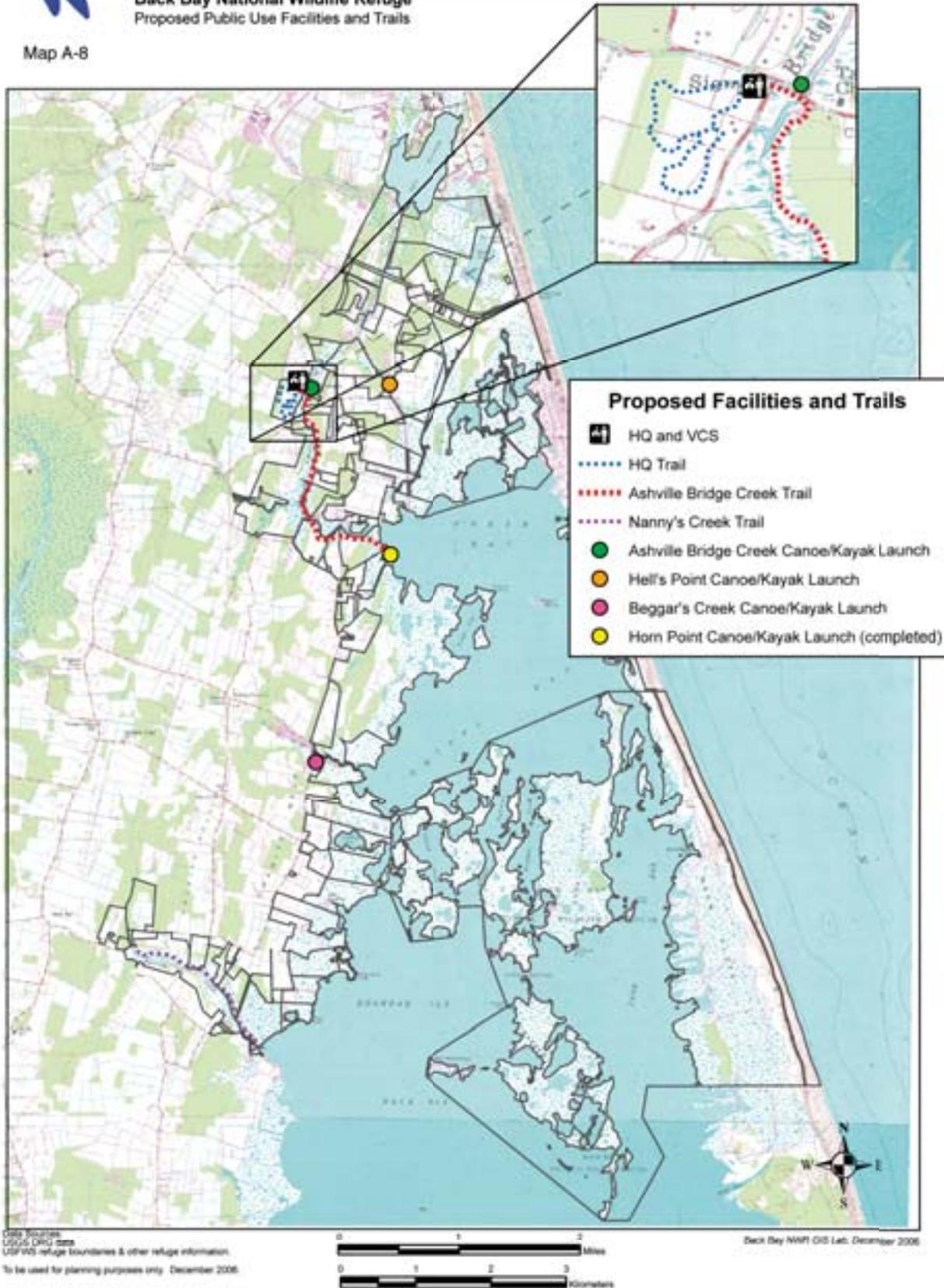
Appendix A: Findings of Appropriateness and Compatibility Determinations



Back Bay National Wildlife Refuge
Proposed Public Use Facilities and Trails

Draft Comprehensive Conservation Plan

Map A-8



Back Bay National Wildlife Refuge

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Back Bay NWR

Use: Walking/Hiking

This exhibit is not required for wildlife-dependent recreational uses, forms of take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public’s understanding and appreciation of the refuge’s natural or cultural resources, or is the use beneficial to the refuge’s natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D. for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use (“no” to [a]), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe (“no” to [b], [c], or [d]) may not be found appropriate. If the answer is “no” to any of the other questions above, we will **generally** not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor’s concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate **Appropriate**

Refuge Manager: _____ Date: _____

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: _____

A compatibility determination is required before the use may be allowed.

JUSTIFICATION FOR A FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Back Bay NWR

Use: Walking/Hiking

NARRATIVE

Walking and hiking are a means to facilitate priority public uses of wildlife observation and photography. Our dike roads and beach are suitable areas for these activities. Also, the 1997 MOU with Virginia Department of Conservation and Recreation states that the refuge allow public access to False Cape State Park, which is five miles south of the Refuge. Vehicles are not allowed through the Refuge, therefore, visitors must walk or hike. These uses do not have negative impacts on the Refuge mission and does not require additional resources to allow.

COMPATIBILITY DETERMINATION

USE: Walking/Hiking

REFUGE NAME: Back Bay National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITIES

Executive Order No. 7907 dated June 6, 1938; Migratory Bird Conservation Act (16 USC 715-715r); Emergency Wetlands Resources Act (100 Stat. 3582-91).

Refuge Purposes

- “...as a refuge and breeding ground for migratory birds and other wildlife” (E.O. 7907).
- “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (16 U.S.C. 715d, Migratory Bird Treaty Act).
- “... the conservation of wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” (16 U.S. C. 3901b. 100 Stat. 3583, Emergency Wetlands Resources Act).

NATIONAL WILDLIFE REFUGE SYSTEM MISSION

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Pub. L. 105–57; 111 Stat. 1252)

DESCRIPTION OF USE

(a) What is this use? Is it a priority public use?

The uses are walking and hiking. Although walking and hiking are not priority public uses, these pedestrian activities do facilitate priority public uses (primarily wildlife observation and photography) of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997.

(b) Where would the use be conducted?

Refuge Barrier Spit (Northern/Public Use Zone) (Map A-8): This developed area comprises approximately 280 acres, and serves more than 110,000 visitors annually. For walking and hiking, this area includes a trail system, two boardwalks providing access to four miles of beach, wildlife viewing facility, viewing scopes, one-half mile of dike roads (gravel), and one mile of asphalt entrance road. Future plans include re-alignment of the entrance road with a parallel, multi-purpose trail. In addition, we plan to expand this zone for public use in order to access the newly constructed wildlife viewing facility located at the northern edge of the “C” Pool impoundment (see next paragraph).

Refuge Barrier Spit (Southern/Impoundment Zone) (Map A-9): Comprising more than 900 acres of restored wetlands, this section of the Refuge currently provides two dike roads that serve as pedestrian trails (7.2 miles) through the Refuge, and provides wildlife viewing and photography opportunity, as well as seasonal public access to False Cape State Park. Visitors must pass through the Refuge Barrier Spit, Northern Zone in order to access this area and/or the State Park. No public vehicle traffic or parking is permitted in this area. This area serves more than 20,000 visitors annually. The only change to wildlife-oriented activities planned in this area is to expand public access to the wildlife viewing facility at the northern edge of “C” Pool (see section “c” below).

Refuge West Side (Map A-9): The Asheville Bridge Creek Environmental Education Center (ABCEEC) provides pedestrian activities via a short self-guided interpretive trail and a wildlife viewing/activity pier. The Frank Carter Impoundments on Colchester Road provide for pedestrian activities (1.4 miles) and has a wildlife viewing platform.

We have future plans to construct two multi-purpose trails; one on Tract #244 at the corner of Sandbridge Road and New Bridge Road, and the other to be along the east side of Asheville Bridge Creek to the Horn Point Public Access Site. The former would be in conjunction with the newly proposed headquarters/Visitor Contact Station (HQ/VCS) (see Compatibility Determination titled “Operation of VCS and Public Parking”).

(c) When would the use be conducted?

Refuge Barrier Spit (Northern/Public Use Zone): Year-round, one-half hour before sunrise to one-half hour after sunset. A temporary closure to these activities would be implemented during any scheduled Refuge hunt dates.

Refuge Barrier Spit (Southern/Impoundment Zone): Open to pedestrian activities seasonally, from April 1 through October 31, from one-half hour before sunrise to a one-half hour after sunset. The Southern Zone oceanfront beach remains open to these activities year-round, except on scheduled public hunt dates.

These impoundments provide undisturbed resting and feeding for migratory waterfowl during the winter months; therefore they are closed to all pedestrian access from November 1 through March 31. The only change to wildlife-oriented activities planned in this area is to expand public access to the wildlife viewing facility, which lies approximately 500 yards past the public open/close boundary.

Refuge West Side: Year-round from one-half hour before sunrise to one-half hour after sunset, at all locations. Trails on the west side would remain open during hunting seasons, as the trails are not near the designated hunt zones.

(d) How would the use be conducted?

We would conduct pedestrian activities much as we conduct them presently. Such activities would be allowed on established roads and trails that have been designed to accommodate such uses, in areas that are the least sensitive to human intrusion. These uses would be conducted for the general public, as well as for organized groups, including schools and scout groups. Groups of 10 or more will be required to have permission to visit the Refuge for these activities, and a seasonal

entrance fee from April 1 through October 31 will be charged to all, with the exception of school groups, scouts on merit badge projects assignments, or children under 16 years of age.

(e) Why is the use being proposed?

Wildlife observation and photography are two of the six priority public uses on National Wildlife Refuges. If compatible, they are to receive enhanced consideration over other secondary public uses. Pedestrian travel, including walking and hiking, are modes of transportation used to access areas for participating in the two identified priority public uses. Future road and trail development at the newly proposed headquarters/visitor contact station site will be designed to maximize resource protection, while providing safe and convenient access to nearby trails via these transportation modes. Realignment of the entrance road and the multi-use trail planned to parallel the entrance road will accommodate safer passage for visitors.

AVAILABILITY OF RESOURCES:

The resources necessary to provide and administer this use, at current use levels, is available within current and anticipated Refuge budgets. Staff time associated with administering this use is related to assessing and conducting trail maintenance, including gates and signs, monitoring potential impacts of the use on Refuge resources and visitors, and providing information to the public about the uses.

The Visitor Services Manager is available for public outreach. A Park Ranger will monitor visitor use and user interactions. The Park Ranger will conduct law enforcement activities to provide for visitor safety and resource protection. Maintenance staff performs the regular maintenance and repairs of Refuge roads and associated structures.

ANTICIPATED IMPACTS OF THE USE:

Pedestrian travel has the potential of impacting shorebird, waterfowl, marshbirds and other migratory bird populations feeding and resting near the trails and on beaches during certain times of the year. Use of upland trails is more likely to impact songbirds than other migratory birds. Human disturbance to migratory birds has been documented in many studies in different locations.

Direct Impacts

Direct impacts have an immediate affect on wildlife. We expect those impacts to include the presence of humans disturbing wildlife, which typically results in a temporary displacement without long-term effects on wildlife individuals or populations. Some species will avoid the areas people frequent, such as the developed trails and the buildings, while others seem unaffected by or even drawn to the presence of humans. Overall, those effects should not be significant, because most of the Refuge will experience minimal public use.

Conflicts arise when migratory birds and humans are present in the same areas (Boyle and Samson 1985). Response of wildlife to human activities includes: departure from site (Owen 1973, Burger 1981, Korschgen et al 1985, Henson and Grant 1991, Kahl 1991, Klein 1993), use of suboptimal habitat (Erwin 1980, Williams and Forbes 1980), altered behavior (Burger 1981, Korschgen et al. 1985, Morton et al. 1989, Ward and Stehn 1989, Havera et al. 1992, Klein 1993), and increase in energy expenditure (Morton et al. 1989, Belanger and Bedard 1990). McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during

the day. The location of recreational activities impacts species in different ways. Miller et al. (1998) found that nesting success was lower near recreational trails, where human activity was common, than at greater distances from the trails. A number of species have shown greater reactions when pedestrian use occurred off trail (Miller, 1998). In addition, Burger (1981) found that wading birds were extremely sensitive to disturbance in the northeastern U.S. In regard to waterfowl, Klein (1989) found migratory dabbling ducks to be the most sensitive to disturbance and migrant ducks to be more sensitive when they first arrived, in the late fall, than later in winter. She also found gulls and sandpipers to be apparently insensitive to human disturbance, with Burger (1981) finding the same to be true for various gull species.

For songbirds, Gutzwiller et al. (1997) found that singing behavior of some species was altered by low levels of human intrusion. Pedestrian travel can impact normal behavioral activities, including feeding, reproductive, and social behavior. Studies have shown that ducks and shorebirds are sensitive to pedestrian activity (Burger 1981, 1986). Resident waterbirds tend to be less sensitive to human disturbance than migrants, and migrant ducks are particularly sensitive when they first arrive (Klein 1993). In areas where human activity is common, birds tolerated closer approaches than in areas receiving less activity.

Indirect Impacts

Laskowski et al. (1993), studied behavior of snowy egrets, female mallards, and greater yellowlegs on Back Bay NWR within 91.4 meters of impoundment dikes used by the general public. Behavior of snowy egrets was recorded during August and September 1992 to represent post-breeding marsh and wading birds. Mallards were monitored during migration (November 1992) and during the winter January (1993). Greater yellowlegs' behavior was observed during the northward shorebird migration (May 1993). Behavior was monitored during the typical public activities of walking, bicycling, and driving a vehicle past the sample sites.

The study found that snowy egret resting behavior decreased and alert behavior increased in the presence of humans. Preening decreased when humans were present, but this change was not significant. Feeding, walk/swim, and flight behaviors were not related to human presence. Female mallards in November increased feeding, preening and alert behaviors in the presence of humans. Resting, walk/swim, and flight behavior were not influenced by human presence. In January, female mallard resting and preening behavior were not influenced by the presence of humans. However, feeding, alert, walk/swim, and flight behaviors were related to human presence. Greater yellowlegs increased alert behavior in the presence of humans. No other behaviors were affected. Maintenance behavior (combined feeding, resting, and preening) decreased when humans were present for all study species. In addition, this decrease was accompanied by an increase in escape behavior by each species. Maintenance behavior of mallards in January decreased in the presence of vehicles and combined disturbance. Escape behavior increased when vehicles were present. Maintenance behavior of greater yellowlegs declined when bicycles and vehicles were present but was not influenced by pedestrian presence.

During a five year study which involved nine different species of birds, researchers found only minimal evidence that intrusion affected bird distributions (Gutzwiller and Anderson 1999). This study also found that the species affected by intrusion were not consistent from year to year or within study areas and could be due to habituation of intrusion (Gutzwiller and Anderson 1999).

People can be vectors for invasive plants by moving seeds or other propagules from one area to another. Once established, invasive plants can out-compete native plants, thereby altering habitats and indirectly impacting wildlife. The threat of invasive plant establishment will always be an issue requiring annual monitoring and treatment when necessary. Our staff will work at eradicating invasive plants and educating the visiting public. Also, opening Refuge lands to public use can often result in littering, vandalism, or other illegal activities on the Refuge.

Cumulative Impacts

Impacts may be minor when we consider them alone, but may become important when we consider them collectively. Our principal concern is repeated disruptions of nesting, resting, or foraging birds. Our knowledge and observations of the affected areas show no evidence that uses cumulatively will adversely affect the wildlife resource. Although we do not expect substantial cumulative impact from these uses in the near term, it will be important for Refuge staff to monitor those uses and, if necessary, respond to conserve high-quality wildlife resources.

Refuge staff, in collaboration with volunteers, will monitor and evaluate the effects of these uses to discern and respond to any unacceptable impacts on wildlife or habitats. To mitigate those impacts, the Refuge will continue to close areas to the public to protect wildlife during critical life periods.

Future road and trail development at the newly proposed headquarters/visitor contact station site will be accomplished on a previously disturbed agricultural site. Realignment of the entrance road and developing a multi-use trail will all occur in an area that has already been developed primarily to accommodate priority public uses and to deliver utilities to the current headquarters. Therefore, little wildlife value will be lost due to newly proposed construction projects. We expect no additional effects from providing these uses on the Refuge.

PUBLIC REVIEW AND COMMENT:

As part of the CCP process for Back Bay NWR this compatibility determination will undergo extensive public review, including a comment period of 30 days following the release of the Draft CCP/EA.

DETERMINATION (CHECK ONE BELOW):

Use is Not Compatible

Use is Compatible With the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

No off-road or off-trail access will be permitted, except for emergency or administrative purposes, for the current motor vehicle access permit program for North Carolina residents, and for hunters.

Groups of 10 or more will be required to have permission to visit the Refuge for these activities, and a seasonal entrance fee from April 1 through October 31 will be charged to all, with the exception of school groups, scouts on merit badge projects assignments, or children under 16 years of age.

JUSTIFICATION:

Walking and hiking have been determined to be compatible provided the stipulations necessary to ensure compatibility are implemented, and the use does not exceed thresholds necessary for visitor safety and resource protection. We do not expect this use to materially interfere with or detract from the mission of the National Wildlife Refuge System, nor diminish the purposes for which the refuge was established. It will not pose significant adverse effects on Refuge resources, nor interfere with public use of the Refuge, nor cause an undue administrative burden.

Visitors participating in these uses, which facilitate wildlife observation and photography, will provide compatible recreational opportunities for visitors to observe wildlife habitats firsthand, and learn about wildlife and wild lands at their own pace in an unstructured environment. Authorization of these uses will result in a greater constituency for achieving Refuge goals, and, ultimately, the Service mission.

Signature: Refuge Manager _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

Mandatory 10-year re-evaluation date: _____
(Date)

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Appendix A: Findings of Appropriateness and Compatibility Determinations



Back Bay National Wildlife Refuge

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Back Bay NWR

Use: Bicycling

This exhibit is not required for wildlife-dependent recreational uses, forms of take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public’s understanding and appreciation of the refuge’s natural or cultural resources, or is the use beneficial to the refuge’s natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D. for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use (“no” to [a]), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe (“no” to [b], [c], or [d]) may not be found appropriate. If the answer is “no” to any of the other questions above, we will **generally** not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes _____ No ✓

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor’s concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate _____ **Appropriate** ✓

Refuge Manager: _____ Date: _____

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: _____

A compatibility determination is required before the use may be allowed.

JUSTIFICATION FOR A FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Back Bay NWR

Use: Bicycling

NARRATIVE

Like walking and hiking, biking is another means to observe wildlife and take photographs. Our dike roads and beach are suitable areas for biking and observing wildlife. Also, the 1997 MOU with Virginia Department of Conservation and Recreation states that the refuge allow public access to False Cape State Park, which is five miles south of the Refuge. Vehicles are not allowed through the Refuge to the State Park; therefore, visitors must walk, hike or bike. This use does not have negative impacts on the Refuge mission and does not require additional resources to allow.

COMPATIBILITY DETERMINATION

USE: Bicycling

REFUGE NAME: Back Bay National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITIES

Executive Order No. 7907 dated June 6, 1938; Migratory Bird Conservation Act (16 USC 715-715r); Emergency Wetlands Resources Act (100 Stat. 3582-91).

REFUGE PURPOSES

- “...as a refuge and breeding ground for migratory birds and other wildlife” (E.O. 7907).
- “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (16 U.S.C. 715d, Migratory Bird Treaty Act).
- “... the conservation of wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” (16 U.S. C. 3901b. 100 Stat. 3583, Emergency Wetlands Resources Act).

NATIONAL WILDLIFE REFUGE SYSTEM MISSION

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Pub. L. 105–57; 111 Stat. 1252)

DESCRIPTION OF USE

(a) What is the use? Is the use a priority public use?

The use is bicycling on Back Bay National Wildlife Refuge. Bicycling is not a priority public use of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

(b) Where would the use be conducted?

Biking would be allowed in any public use “zone” of the Refuge. This includes the beach (excluding the North Mile) and trails at the current headquarters/visitor contact station (VCS) on the barrier spit, at canoe/kayak launch facilities and at the proposed new headquarters/VCS and associated trails at Tract #244. This use would not be permitted in areas managed for habitat conservation or wildlife protection.

(c) When would the use be conducted?

This use would be allowed whenever the zones identified in “b” above are open for public access. Open periods are from one-half hour before sunrise to one-half hour after sunset as follows:

- beach and VCS area to the south end of D-Pool (head of east and west dikes) – year round
- dike trails south of D-Pool – April 1 through October 31
- canoe/kayak launches – April 1 through October 31
- proposed new visitor contact station and trails – year round

(d) How would the use be conducted?

Bicycling can facilitate priority public uses; most commonly observing the natural landscape and taking photos from a bicycle. Riders stop to observe associated animal and plant communities. The use mainly occurs in groups with an average group size of 2-4 riders. Any group of bicyclists exceeding 10 requires a permit to promote safety with other users.

Travel would be limited to designated trails with gravel surfaces and where road width can accommodate the safe passage of other users. Designated trails also have sufficient viewing distance for cyclists to detect the approach of other users and maneuver to accommodate them. Cyclists either enter the Refuge at public entry points or transport bicycles by vehicle and park at designated parking sites.

Cycling will be conducted in accordance with the stipulations necessary to ensure compatibility. Safety and information signs will be installed at Refuge entry points and at appropriate sites where designated roads intersect other roads and trails. Brochures and maps depicting the roads open for this use will be available at Refuge headquarters and kiosks.

Roads will be maintained in such a manner as is practical to minimize environmental effects such as erosion and sedimentation and to provide safe conditions for travel. Existing potholes that promote off-road detours will be filled with gravel. Roads will be monitored and maintained.

(e) Why is the use being proposed?

Although bicycling is not directly a priority public use, it is a means/mechanism to conduct priority public uses, just like walking and hiking. Cycling on the Refuge would provide an increased opportunity for the public to participate in priority public uses. Cycling is less physically demanding than pedestrian access and provides a more expedient mode of travel to view the Refuge's diverse biological assets. At current levels of use and restricted to designated roads with hardened and modified surfaces, cycling causes minimal surface disturbance. Designated roads at the southern end of the Refuge provide good opportunities to view beach, dunes, forested, and marsh communities.

Outfitters, academic institutions and civic organizations (including the Boy Scouts, who conduct environmental education tours on bicycles) have led public biking tours of/through the Refuge. The Refuge anticipates these organizations will continue to request to lead such tours for groups.

AVAILABILITY OF RESOURCES:

The resources necessary to provide and administer this use, at current use levels, is available within current and anticipated Refuge budgets. Staff time associated with administering this use is related to assessing and conducting trail maintenance, including kiosks, gates and signs, monitoring potential impacts of the use on Refuge resources and visitors, and providing information to the public about the use.

The Visitor Services Manager is available for public outreach. A Park Ranger will monitor visitor use and user interactions. The Park Ranger will conduct law enforcement activities to provide for visitor safety and resource protection. Maintenance staff performs the regular maintenance and repairs of Refuge roads and associated structures.

ANTICIPATED IMPACTS OF THE USE:

There is some wildlife disturbance associated with bicycling on the Refuge; however, it is believed not to be at an increased rate when compared to pedestrian use. This is the same for trail/road maintenance. Impacts on habitat from bike tires is also negligible. There is also an inherent greater risk to the public from bicycling. On gravel roads riders can fall, causing personal and property damage to themselves or other Refuge users.

Biking on Refuge trails has the potential of impacting shorebird, waterfowl, marshbirds and other migratory bird populations feeding and resting near the trails and on beaches during certain times of the year. Use of upland trails is more likely to impact songbirds than other migratory birds. Human disturbance to migratory birds has been documented in many studies in different locations.

Direct Impacts

Direct impacts have an immediate affect on wildlife. We expect those impacts to include the presence of humans disturbing wildlife, which typically results in a temporary displacement without long-term effects on wildlife individuals or populations. Some species will avoid the areas people frequent, such as the developed trails and the buildings, while others seem unaffected by or even drawn to the presence of humans. Overall, those effects should not be significant, because most of the Refuge will experience minimal public use.

Conflicts arise when migratory birds and humans are present in the same areas (Boyle and Samson 1985). Response of wildlife to human activities includes: departure from site (Owen 1973, Burger 1981, Korschgen et al 1985, Henson and Grant 1991, Kahl 1991, Klein 1993), use of suboptimal habitat (Erwin 1980, Williams and Forbes 1980), altered behavior (Burger 1981, Korschgen et al. 1985, Morton et al. 1989, Ward and Stehn 1989, Havera et al. 1992, Klein 1993), and increase in energy expenditure (Morton et al. 1989, Belanger and Bedard 1990). McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. The location of recreational activities impacts species in different ways. Miller et al. (1998) found that nesting success was lower near recreational trails, where human activity was common, than at greater distances from the trails. A number of species have shown greater reactions when pedestrian use occurred off trail (Miller, 1998). In addition, Burger (1981) found that wading birds were extremely sensitive to disturbance in the northeastern U.S. In regard to waterfowl, Klein (1989) found migratory dabbling ducks to be the most sensitive to disturbance and migrant ducks to be more sensitive when they first arrived, in the late fall, than later in winter. She also found gulls and sandpipers to be apparently insensitive to human disturbance, with Burger (1981) finding the same to be true for various gull species.

For songbirds, Gutzwiller et al. (1997) found that singing behavior of some species was altered by low levels of human intrusion. Pedestrian travel can impact normal behavioral activities, including feeding, reproductive, and social behavior. Studies have shown that ducks and shorebirds are sensitive to pedestrian activity (Burger 1981, 1986). Resident waterbirds tend to be less sensitive

to human disturbance than migrants, and migrant ducks are particularly sensitive when they first arrive (Klein 1993). In areas where human activity is common, birds tolerated closer approaches than in areas receiving less activity.

Indirect Impacts

Laskowski et al. (1993), studied behavior of snowy egrets, female mallards, and greater yellowlegs on Back Bay NWR within 91.4 meters of impoundment dikes used by the general public. Behavior of snowy egrets was recorded during August and September 1992 to represent post-breeding marsh and wading birds. Mallards were monitored during migration (November 1992) and during the winter January (1993). Greater yellowlegs' behavior was observed during the northward shorebird migration (May 1993). Behavior was monitored during the typical public activities of walking, bicycling, and driving a vehicle past the sample sites.

The study found that snowy egret resting behavior decreased and alert behavior increased in the presence of humans. Preening decreased when humans were present, but this change was not significant. Feeding, walk/swim, and flight behaviors were not related to human presence. Female mallards in November increased feeding, preening and alert behaviors in the presence of humans. Resting, walk/swim, and flight behavior were not influenced by human presence. In January, female mallard resting and preening behavior were not influenced by the presence of humans. However, feeding, alert, walk/swim, and flight behaviors were related to human presence. Greater yellowlegs increased alert behavior in the presence of humans. No other behaviors were affected. Maintenance behavior (combined feeding, resting, and preening) decreased when humans were present for all study species. In addition, this decrease was accompanied by an increase in escape behavior by each species. Maintenance behavior of mallards in January decreased in the presence of vehicles and combined disturbance. Escape behavior increased when vehicles were present. Maintenance behavior of greater yellowlegs declined when bicycles and vehicles were present but was not influenced by pedestrian presence.

The presence of bicycles and vehicles increased escape behavior. Snowy egrets and female mallards increased movement between subplots and to areas within the study area but further from the disturbance.

During a five year study which involved nine different species of birds, researchers found only minimal evidence that intrusion affected bird distributions (Gutzwiller and Anderson 1999). This study also found that the species affected by intrusion were not consistent from year to year or within study areas and could be due to habituation of intrusion (Gutzwiller and Anderson 1999).

People can be vectors for invasive plants by moving seeds or other propagules from one area to another. Once established, invasive plants can out-compete native plants, thereby altering habitats and indirectly impacting wildlife. The threat of invasive plant establishment will always be an issue requiring annual monitoring and treatment when necessary. Our staff will work at eradicating invasive plants and educating the visiting public. Also, opening Refuge lands to public use can often result in littering, vandalism, or other illegal activities on the Refuge.

Cumulative Impacts

Impacts may be minor when we consider them alone, but may become important when we consider them collectively. Our principal concern is repeated disruptions of nesting, resting, or foraging

birds. Our knowledge and observations of the affected areas show no evidence that biking on refuge trails will adversely affect the wildlife resource. Although we do not expect substantial cumulative impact from biking in the near term, it will be important for Refuge staff to monitor, and, if necessary, respond to conserve high-quality wildlife resources.

Refuge staff, in collaboration with volunteers, will monitor and evaluate the effects of biking to discern and respond to any unacceptable impacts on wildlife or habitats. To mitigate those impacts, the Refuge will continue to close areas to the public to protect wildlife during critical life periods.

PUBLIC REVIEW AND COMMENT:

As part of the CCP process for Back Bay NWR this compatibility determination will undergo extensive public review, including a comment period of 30 days following the release of the Draft CCP/EA.

DETERMINATION (CHECK ONE BELOW):

Use is Not Compatible

Use is Compatible With the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

- Cycling to facilitate priority public uses is only compatible on the roads designated and described above.
- Access routes will not significantly impact threatened or endangered species.
- Signs necessary for visitor information, safety, and traffic control will be installed.
- The Refuge will conduct an outreach program to promote public awareness and compliance with Refuge public use regulations.
- Camping and overnight parking are prohibited.
- Cycling is not allowed during the white tail deer/feral hog hunting season (October) for public safety.
- To promote safety with other users and encourage a nature viewing experience, group size limit exceeding 10 cyclists will require a permit.
- All routes designated for public access will be annually inspected for maintenance needs. Road and trail conditions that require immediate maintenance will be identified and appropriate action will be taken to correct such conditions. Prompt action will be taken to correct any conditions that risk public safety.
- Routine law enforcement patrols will be conducted throughout the year. The patrols will promote compliance with Refuge regulations, monitor public use patterns and public safety. Conditions that are or will risk public safety will be identified and appropriate action will be promptly taken to correct such conditions.

JUSTIFICATION:

This use has been determined to be compatible provided the stipulations necessary to ensure compatibility are implemented, and the use does not exceed thresholds necessary for visitor safety and resource protection. This activity will not materially interfere with or detract from the mission of the NWRS or purposes for which Back Bay NWR was established. It will not pose significant adverse effects on Refuge resources, will not interfere with public use of the Refuge, nor cause an undue administrative burden. It is a means to conduct priority public uses.

Signature: Refuge Manager _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

Mandatory 10-year re-evaluation date: _____
(Date)

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FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Back Bay NWR

Use: Launching of Non-Trailerred Vessels

This exhibit is not required for wildlife-dependent recreational uses, forms of take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public’s understanding and appreciation of the refuge’s natural or cultural resources, or is the use beneficial to the refuge’s natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D. for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use (“no” to [a]), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe (“no” to [b], [c], or [d]) may not be found appropriate. If the answer is “no” to any of the other questions above, we will **generally** not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor’s concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate **Appropriate**

Refuge Manager: _____ Date: _____

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: _____

A compatibility determination is required before the use may be allowed.

JUSTIFICATION FOR A FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Back Bay NWR

Use: Launching of Non-Trailerred Vessels

NARRATIVE

The Refuge does not have the infrastructure to support trailers in our parking areas; however, it is within Refuge operational capacity to permit the launching of vessels that fit on or in a vehicle. Non-trailerred vessels tend to be smaller in size, or non-motorized, which are hand launched (i.e. canoe/kayaks). Like walking, hiking, and biking, canoe/kayaking is another means to observe wildlife and take photographs. Smaller boats, not intended for fast speeds, are utilized to access the Long Island hunt zone and to fish Back Bay. Non-motorized boats do not have a negative impact on water quality of the Refuge. We currently provide car top boat launch facilities at two locations on the Refuge, with three more proposed in the CCP.

COMPATIBILITY DETERMINATION

USE: Launching of Non-Trailerred Vessels

REFUGE NAME: Back Bay National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITIES

Executive Order No. 7907 dated June 6, 1938; Migratory Bird Conservation Act (16 USC 715-715r); Emergency Wetlands Resources Act (100 Stat. 3582-91).

REFUGE PURPOSES

- “...as a refuge and breeding ground for migratory birds and other wildlife” (E.O. 7907).
- “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (16 U.S.C. 715d, Migratory Bird Treaty Act).
- “... the conservation of wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” (16 U.S. C. 3901b. 100 Stat. 3583, Emergency Wetlands Resources Act).

NATIONAL WILDLIFE REFUGE SYSTEM MISSION

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Pub. L. 105–57; 111 Stat. 1252)

DESCRIPTION OF USE

(a) What is this use? Is it a priority public use?

The use is the launching of non-trailerred vessels. This use is not considered a priority public use of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997.

(b) Where would the use be conducted?

Launching would be allowed at five locations (Map A-10); the existing canoe/kayak launch at the headquarters/Visitor contact Station, the existing canoe/kayak launch on Horn Point Road, and the proposed canoe/kayak launches on Muddy Creek Road at Beggar’s Creek, on Sandbridge Road at Asheville Bridge Creek and on Sandbridge Road at Hell’s Point Creek.

(c) When would the use be conducted?

The canoe/kayak launch at the existing headquarters/Visitor contact Station is currently open and will continue to be open year-round. The canoe/kayak launch on Horn Point Road is currently open and will continue to be open from April 1 through October 31 of each year. The proposed

canoe/kayak launch at Asheville Bridge Creek will be open from April 1 through October 31, until the time when the administrative headquarters is moved to that locale, as proposed in the Draft CCP. The proposed Hell's Point Creek and Beggar's Creek canoe/kayak launches will be open for public use from April 1 through October 31 of each year. Use will be permitted one-half hour before sunrise to one-half hour after sunset. For launches seasonally opened, Special Use Permits can be issued for use during closed seasons.

(d) How would the use be conducted?

Visitors to these sites will only be allowed to launch boats that fit in or on top of their vehicle. No trailers will be permitted due to limited parking. No personal watercrafts (PWCs) will be allowed to launch, even if not on a trailer. Canoe/Kayak outfitters, or guides, will be charged a fee and granted a Special Use Permit to utilize a multi-boat trailer.

(e) Why is this use being proposed?

This use allows for a mode of travel on water to view the Refuge's diverse biological assets. At current levels of use, canoes and kayaks would cause minimal resource disturbances. This use provides a means to conduct wildlife-dependent recreational activities under the NWRS Improvement Act of 1997 (i.e., fishing, wildlife observation, photography, hunting). Also, as part of the Refuge boundary expansion in the late 1980's, the Refuge agreed to the City of Virginia Beach to increase public access to Back Bay through cooperative access sites.

AVAILABILITY OF RESOURCES

Providing/Managing this use, at all locations, is within the available Visitor Services Program staff resources because visitors utilizing this use "come-and-go" just like a visitor walking the trails to observe wildlife. Compliance with site regulations is within the regular duties of the Station Law Enforcement Officer. However, the facilities constructed to provide this use require initial start-up and additional maintenance costs, of which the former would need to be appropriated by Congress.

Anticipated costs are:

- Materials to develop/enhance the existing and proposed sites
 - Horn Point Road – \$11,000
 - Asheville Bridge Creek - \$5,000
 - Hell's Point Creek - \$200,000
 - Beggar's Creek - \$200,000
- Visitor Services Manager (GS-12) and/or GS-09 Refuge Operations Specialist (coordination with City and contractors) - 24 weeks start-up = **\$38,400**; 4 weeks/yr. after start-up = **\$6,400**
- Deputy Refuge Manager (GS-13) (review proposals, budgeting) - 8 weeks start-up = **\$15,000**; 2 weeks/yr. after start-up = **\$3,750**
- Refuge Manager (GS-14) (coordination, etc.) – 4 weeks start-up = **\$8,320**
- Maintenance Worker (WG-09) (construct and maintain blind; maintain facilities) - 4 weeks start-up = **\$3,800**; 4 weeks/yr. after start-up = **\$3,800**
- Law Enforcement Officer (GS-09) (enforcement patrols) 6 weeks/yr. = **\$6,300**

ANTICIPATED IMPACTS OF THE USE

Any time a public access site is opened, there is potential for increased littering and loitering. This impact is reduced by providing necessary amenities for trash and locked gates to restrict access when closed.

For songbirds, Gutzwiller et al. (1997) found that singing behavior of some species was altered by low levels of human intrusion. Boat launching may minimally impact normal behavioral activities, including feeding, reproductive, and social behavior; however the areas identified for this activity already have a long history of human disturbance and related habitat degradation. Studies have shown that ducks and shorebirds are sensitive to human activity (Burger 1981, 1986). Resident waterbirds tend to be less sensitive to human disturbance than migrants, and migrant ducks are particularly sensitive when they first arrive (Klein 1993). In areas where human activity is common, birds tolerated closer approaches than in areas receiving less activity.

The Horn Point Launch site is closed to boat launching during the peak bird migration season of November through March. In any case, there is a significant seasonal reduction of boat launching activity on the bay during these months due to colder weather conditions and a related substantial drop in boating tourism and recreation on the bay.

Motor boats can erode sensitive marsh shoreline with their wakes, disturb nesting birds and re-suspend bottom sediments, which reduce water quality and SAV production. These impacts are reduced by prohibiting trailerred boats and personal watercrafts that tend to be bigger and faster. Non-motorized boats do not have a negative impact on water quality of the Refuge.

Providing greater boating access to Back Bay at appropriate Refuge locations will allow greater opportunity for the public to view and photograph wildlife in a natural setting, and provide expanded environmental education opportunities.

PUBLIC REVIEW AND COMMENT

As part of the CCP process for Back Bay NWR this compatibility determination will undergo extensive public review, including a comment period of 30 days following the release of the Draft CCP/EA.

DETERMINATION (CHECK ONE BELOW):

Use is Not Compatible

Use is Compatible With the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY

No trailerred boats and no personal watercrafts will be allowed to launch. Additional funding must be provided to develop two of the proposed launch sites (see Availability of Resources above).

JUSTIFICATION

As part of the Refuge boundary expansion in the late 1980's, the Refuge agreed to the City of Virginia Beach to increase public access to Back Bay through cooperative access sites on lands acquired by the Refuge. The Refuge currently provides car top boat launch facilities at two locations on the Refuge. Like walking, hiking, and biking, canoe/kayaking is another means to observe wildlife and take photographs. Smaller boats, not intended for fast speeds, are utilized to access the Long Island hunt zone and to fish Back Bay. Non-motorized boats do not have a negative impact on water quality of the Refuge.

This use has been determined to be compatible provided the stipulations necessary to ensure compatibility are implemented, and the use does not exceed thresholds necessary for visitor safety and resource protection. This activity will not materially interfere with or detract from the mission of the NWRS or purposes for which Back Bay NWR was established. It will not pose significant adverse effects on Refuge resources, will not interfere with public use of the Refuge, nor cause an undue administrative burden. It is a means to conduct priority public uses.

Signature: Refuge Manager _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

Mandatory 10-year re-evaluation date: _____
(Date)