

**Appendix C:
Substantive Comments**

Responses to Substantive Comments

Planning Process

Comment: Some reviewers voiced concern regarding the length of the comment period. Some state agencies voiced a concern because a regulatory requirement gives these agencies a minimum of 30 days for comments.

Response: The original comment period was 30 days as outlined in the Notice of Availability, advertised in the Federal Register March 13, 2006. This meets the requirement for public involvement under the National Environmental Policy Act (NEPA). The news release published by the Refuge provided a public comment period of 33 days, March 13, 2006 through April 14, 2006. Due to delays in providing compact disks and hard copies, the comment period was extended an additional 10 days to provide adequate time for the state agencies to comment.

Forest Management

Comment: There were several comments on the use of timber harvest as a management tool to meet habitat management goals. Some reviewers felt strongly that this is a critical tool for managing habitat for red cockaded woodpeckers and restoration and maintenance of Atlantic white cedar forests. While some reviewers felt strongly against timber harvest in general on National Wildlife Refuges others recommended the use of “biological woodsmen” for forest management activities to reduce impacts to the fragile habitats.

Response: Repeated logging and poor forest management practices have left the swamp in the condition we find it today. In the case of a catastrophic event such as a hurricane or fire, large scale salvage is necessary to remove the damaged and fallen stems to provide suitable conditions for regeneration of native species. Commercial harvest is never used simply as a means of generating revenue. It is a valuable means of accomplishing habitat improvement on a scale that will aid in restoration of the Dismal Swamp ecosystem.

The use of “biological woodsmen” might be a viable strategy in some areas, but would be ineffective over most of the refuge. The poorly drained, deep organic soils would not support the weight of the draft animals used to remove the material. In addition, many of the salvage units are half mile or more from the nearest road. These conditions require the use of specially designed, low ground pressure equipment, at times in conjunction with helicopters.

Comment: One reviewer felt that there should be a forest management objective to expand and enhance Mesic Mixed Forest where feasible.

Response: Mesic Mixed Forest is a habitat component found along the Suffolk Scarp on the western edge of the refuge, at the extreme north end of the refuge, and on a series of sand ridges or mesic islands within the refuge. This community makes up less than one percent of the refuge. It is a small but important component of the overall habitat found on the refuge. Although specific habitat management strategies have not been identified in the plan we are aware of its importance to the overall management of the refuge. The Comprehensive Conservation Plan is a fifteen year plan geared to identify specific achievable priorities for the refuge within that time period. Habitat Management priorities identified within the plan for restoration of Atlantic White Cedar (AWC) and pine/pocosin habitat are significant projects that will be challenging to complete within this timeframe. The refuge will, as resources allow, manage Mesic Mixed Forest habitats although it is not specifically identified within the CCP. A more complete discussion of management activities for this habitat will be identified in a step-down plan to the CCP, the Habitat Management Plan (HMP), which will be developed in the near future.

Comment: One reviewer requested the Service ensure that forest management activities do not interfere with planned tourism activities and attractions in either of the refuges.

Response: The National Wildlife Refuge System (NRWS) is the only system of Federal lands acquired and managed for the conservation of fish, wildlife, plants and their habitat. The National Wildlife Refuge System Improvement Act of 1997 formally established our mission “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”. According to the House Report 105-106 on the Improvement Act of 1997, “this mission establishes that the conservation and management of refuges is the first priority. This act clearly states that each refuge shall be managed to fulfill both the mission of the System and the individual refuge purposes. This policy serves to underscore that the fundamental mission of our Refuge System is wildlife conservation: wildlife and wildlife conservation must come first.”

The Dismal Swamp Act of 1974 defines the purpose of the refuge to: “Manage the area for the primary purpose of protecting and preserving a unique and outstanding ecosystem, as well as protecting and perpetuating the diversity of animal and plant life therein...” Forest management activities are key habitat management and wildlife conservation tools used for the management and restoration of this unique and outstanding ecosystem. Even though management activities take a priority

over wildlife dependent recreational opportunities, the refuge will work closely to coordinate all secondary activities to minimize impacts where possible to any planned activities.

Comment: One reviewer encouraged the refuge to provide additional information on the cumulative effects of the tree removal included in the preferred alternative, together with maps that show the areas to be cleared within each forest community.

Response: The Environmental Consequences section of the draft CCP/EA discusses the cumulative effect of tree removal included in the preferred alternative. Additionally, prior to the development of the draft CCP, Environmental Assessments were completed for the two primary projects that include a tree removal component: Atlantic White Cedar Salvage and Restoration; Red-cockaded Woodpecker Habitat Enhancement and Re-introduction. These documents also discuss the cumulative effects of the timber harvest operations. These documents have been added to the References and Selected Reading section of the CCP.

As specific plans are developed for the implementation of these projects maps will be developed and incorporated into these plans as well as the HMP that will be developed as a step-down plan to this document.

Comment: VDGIF recommends cooperation between agencies regarding successful management efforts to restore Atlantic White Cedar on the Cavalier Wildlife Management Area (WMA).

Response: Refuge staff has developed significant experience and expertise in the management and restoration of AWC. We are willing to assist Virginia Department of Game and Inland Fisheries (VDGIF), as time and funding allows, in the management and restoration efforts of AWC on the Cavalier or other WMA's.

Fire Management

Comment: The Nature Conservancy recommends the development of agreements to advance the use of ecological fire management on non-refuge lands when trust resources are involved. Additionally, a reviewer encourages the refuge to explore opportunities to partner with these organizations to increase fire management capacity to increase the collective use of fire for the recovery of southern pine forest systems.

Response: An agreement currently exists between the Conservancy and the Fish and Wildlife Service Northeast Region for cooperative fire management activities, including the shared use of personnel, equipment and resources. A similar agreement also exists between the Virginia Department of Conservation and

Recreation’s Natural Heritage Division and Great Dismal Swamp NWR. While both agreements are in need of review and update, they remain valid, and the three partners have done considerable work together on projects over the past two years. The refuge will continue to support these efforts, expand when funding and staff is available, and is committed to the sound use of fire management practices for resource benefits in Southeastern Virginia, regardless of land ownership.

***Comment:** The City of Suffolk requests that prescribed burning be limited to times of the year when there is no high-smog situation.*

Response: Air quality issues in the Hampton Roads area, as in most urban areas, are most often felt during the summer months, which are characterized by hot, humid weather, and the accompanying stagnant air mass. These conditions are typically unfavorable for prescribed burning. The environmental conditions make burning difficult, the desired effects of prescribed fire treatments are harder to achieve, and smoke management parameters, which are a key component of prescribed fire burn planning, generally prohibit burning during these times of year.

***Comment:** One commenter questions the evaluation of air quality impacts from prescribed fire. The negative impacts are not identified. Fine particulate matter from prescribed burns travels thousands of miles and in no way is a “localized impact” as described in the Environmental Consequences.*

Response: The dispersion of smoke is a key component of any prescribed fire burn plan. The impacts of particulate matter generated by fires is most often localized, and takes the form of visibility impairment, and health concerns related to air quality. Both of these occurrences are due to the concentration of particles in the atmosphere. The size of the area being burned, the fuels being burned, and the atmospheric conditions at the time of the burn contribute to the levels of concentration. The ability of the atmosphere to mix out any smoke produced is factored into any burn. While it is true that fine particulate matter can be carried thousands of miles by winds aloft, the impact of those particles diminishes as they continue to mix with the atmosphere in flight, to the point where they may be identifiable and in some way measurable, but pose no health or safety concerns.

Water Management

***Comment:** One reviewer recommends working cooperatively with farmers, landowners, NRCS, Virginia Department of Conservation and Recreation to better regulate or dissipate surface runoff or drainage flow from fields.*

Response: Working cooperatively with neighboring farmers and land owners as well as with other state and federal agencies will always be key to managing water resources for the refuge as well as the ecosystem as a whole. We have added a new strategy to the Land Protection Goal that addresses working in partnership with our neighbors. Much of the challenge of dealing with this issue is our lack of knowledge regarding water flow within the Swamp. Water management and knowledge of the hydrology are areas of great importance to the over all management of the Refuge. In relation to the hydrology, the Great Dismal Swamp NWR recently met with the US Geological Survey, US Army Corps of Engineers, and USFWS/Ecological Services to put together a proposal to study the hydrology of the refuge. Currently funding sources for this 12 – 15 year study are being sought. The information on water movement through the swamp will provide better understanding of just what is happening hydrologically to different communities and how best to maintain and enhance these habitats. Water management has much wider parameters than the knowledge of the hydrology. The areas range from water quality, flood control, and habitat manipulation. The refuge will be putting together a step-down management plan to the CCP that will be used to address more specific management activities for the refuges; that document is the Habitat Management Plan. The Service's policy is to include organizations, governmental (federal, state, & local), and non-governmental in a team effort to bring together as much knowledge as possible in completing the various parts of the HMP, including water management.

Red Cockaded Woodpecker Re-introduction

Comment: One organization supports the project to reintroduce red-cockaded woodpeckers on the refuge but encourages the Service to support the refuges' ability to prescribe burn for the restoration and management of the habitat to support this re-introduction

Response: The Great Dismal Swamp is considered a fire dependent ecosystem. Fire is a natural occurring phenomenon within the Swamp and a key management tool for the management and maintenance of many of the habitat types found on the refuge. Although today we control many of the wildfires that occur within the refuge boundaries, we utilize prescribe fire as a tool to mimic this event in a more controlled manner to help meet many of the management objectives that naturally occurring fire achieves (including the maintenance of red-cockaded woodpecker habitat). The Service will continue to support the use of prescribed fire as a management tool within this ecosystem.

Bear Management

***Comment:** One reviewer stated that additional research is needed to determine the how annual or periodic levels of dispersal of bears from the refuge contributes to the number of bears off refuge and the dispersal corridors used to facilitate movement.*

Response: The refuge agrees that more knowledge is needed on the overall demography and ecology of the “Dismal Swamp” black bear population before any large scale management for this species can occur. The refuge will continue to work closely with state agencies to find funding and support for further population work towards increasing our knowledge of this Coastal Plain population within Virginia and North Carolina.

Other Wildlife Species

***Comment:** One individual recommended the refuge evaluate woodcock use and potential management of the species on the refuge since it is a priority species for the Service.*

Response: The USFWS has identified the American woodcock as a focal species. A Conservation Plan for the species is currently being drafted. It is targeted for completion by the end of Fiscal Year 2006. Even though the Service has identified this species as a priority species, Great Dismal Swamp NWR has not been identified as a priority area for woodcock management.

Early successional habitat is an important requirement for woodcock. The refuge and adjoining areas do support a breeding population of woodcocks, just how big a population and what habitats are being used are not totally understood. The refuge was principally established to restore and maintain historic communities/habitats within the Great Dismal Swamp ecosystem. Many of the restoration and management activities utilized to meet these management objectives will create habitats which may help support woodcock. We believe that as we move towards meeting our primary management goals within the refuge that the American woodcock will remain on the refuge and continue to be an important part of the refuge fauna.

***Comment:** VDGIF recommends that the refuge identify and map suitable habitat for the canebrake rattlesnake, monitor populations and work with state agencies and neighboring landowners for the conservation of the species. They also recommend that the refuge work cooperatively in conducting surveys and research regarding the Rafineque’s big-eared bat.*

Response: The refuge will continue, in close working relationship with the VDGIF and NCWRC, to monitor both of these species as well as the Dismal Swamp Southeast Shrew, the Star-nosed Mole, and the Spotted Turtle. The maintenance and restoration of various communities has continued to provide habitat for all these species, which appear to be uncommon to common on the refuge.

Comment: One reviewer requested that the term *heptofauna*, not *hertptile*, be used when referring collectively to reptiles and amphibians. Also use the term *venomous snakes* instead of *poisonous snakes*.

Response: Comment noted. These changes have been made in the document.

Comment: A concern was voiced regarding the removal of beavers and farming on the refuge.

Response: Beavers are only removed when they directly interfere with water management activities. Specifically, when dams constructed by beavers block water control structures or water flow in key ditches. Beavers are endemic to Virginia and our goal is reduce their impact to our water control structures. There is no farming activity on the refuge.

Land Protection

Comment: A few comments support the protection of the western boundary of the refuge along the Suffolk Scarp. One individual advocates protection of drainage areas east of the refuge and one supports protecting habitat south of the existing boundary.

Response: The refuge staff agrees with this comment. The Service will continue to work with adjacent landowners to provide for wildlife habitat and water quality. Staff will likely increase outreach efforts as well as coordination with agencies and entities that assist private landowners, including the Service's own Partners for Wildlife program.

The Service will continue to partner with the City of Chesapeake, VA, Camden and Pasquotank Counties, NC, Virginia and North Carolina agencies, The Nature Conservancy, and interested individuals to encourage protection of areas east of the Great Dismal Swamp as mentioned in Goal 3.

The Service will continue to monitor land use proposals west of the refuge, particularly along drainage corridors that flow into the Great Dismal Swamp. The Service will increase outreach to the City of Suffolk, VA, and Gates County, NC, as

well as landowners along these drainages. The outreach efforts will educate these entities about the effects their activities could have on the water quality and habitat connections, as well as encourage them to incorporate beneficial practices. Information on programs designed to assist them will also be provided and explained, such as Partners for Wildlife Programs, Farm Bill programs, etc.

Comment: Additionally, one individual supports the protection of existing entrances from encroachment.

Response: Refuge staff agrees that increased residential and/or business development near refuge entrances would be detrimental to aesthetics and ecotourism, as well as increasing the likelihood of negative human-wildlife interactions, decreasing water quality and reducing wildlife travel corridors and habitat. Staff members have presented these concerns to the Cities of Suffolk and Chesapeake and will continue to do so.

Comment: One reviewer encourages the refuge be a strong advocate during local zoning decisions on proposed projects that may affect federal lands.

Response: Refuge staff agrees that the Service should provide comments to the surrounding city and county governments on issues affecting refuge resources and their connecting elements such as inflows and wildlife travel corridors.

Comment: One reviewer feels that the wording of Goal 3 is too narrow and limits protection only to wetland components and falls short of the enabling legislation mandate of "... protecting a unique ecosystem." The term Ecosystem should replace Watershed in Goal 3 and the goal expanded to protect all landscape components.

Response: Refuge staff agrees. Goal 3 shall now read "Provide protection and restoration of those areas within Great Dismal Swamp ecosystem that are remnants of the Great Dismal Swamp and/or are restorable to Great Dismal Swamp habitat while providing support to the protection and restoration of all its components and adjacent habitats that directly affect the vitality and viability of the ecosystem." Additionally, in the objective under Goal 3 we have changed the word "watershed" to "ecosystem".

Comment: One reviewer recommends adding an objective to Goal 3 or Goal 4 that the refuge staff will strive to establish sound, mutually beneficial long-term working relationships with adjacent landowners and key landowners within the ecosystem to help protect this ecosystem.

Response: Refuge staff agrees that partnering and the development of good relationships with our neighbors are keys to the overall protection of the Great Dismal Swamp Ecosystem. The Partners for Fish and Wildlife Program will be able to assist in this strategy in working with landowners to protect habitat on adjoining or nearby property. To this end the following strategy has been added to Goal 3 for Habitat Protection and Restoration: “Develop sound working relationships with adjoining, nearby neighboring and other key landowners within the ecosystem to protect the integrity of the refuge boundary and further the protection of the ecosystem.”

Cultural Resources

Comment: VA Department of Historic Resources says that the discussion in Chapter 2 concerning cultural resources is insufficient to gauge the potential impact of these actions on historic properties. Specific points mentioned include more detailed discussion of archeological and architectural resources, cultural resource surveys, significance of the National Register-listed canal system and results of consultation with tribes.

Response: Additional information regarding cultural resources on the refuge has been added to the document. A review of NRHP identified the Dismal Swamp Canal and the Feeder Ditch as listed National Registered Canal System. Neither of these canals is within the Great Dismal Swamp NWR. Although there are no nationally recognized tribes in the state of Virginia, the Nansemond tribe was on the mailing list for the CCP process. We received no comments from this tribe. The Catawba tribe in North Carolina was also contacted by letter and replied with a response of no immediate concerns. Their request to be notified in the event of construction phase findings has been noted.

Hunting

Comment: Some comments opposed any form of hunting on national wildlife refuges while others expressed support for hunting.

Response:

The National Wildlife Refuge System Improvement Act of 1997 (Refuge Improvement Act) lists hunting as one of six priority, wildlife-dependent public uses to receive enhanced consideration in refuge planning and management. In addition to hunting, other priority uses include fishing, wildlife observation and photography, environmental education and interpretation. Our mandate is to provide high-quality opportunities for these priority uses where they are compatible with respective refuge purposes, goals, and other management priorities.

We acknowledge that some people feel that hunting on a national wildlife refuge is inappropriate and do not want to see hunting in any form on Great Dismal Swamp NWR. Hunting is a traditional form of wildlife-dependent recreation in this country and many refuge visitors deepen their appreciation and understanding of the land and its wildlife through hunting. Regardless of individual opinions about the appropriateness of hunting on refuges, the Refuge Improvement Act requires that we facilitate the six priority wildlife-dependent uses when they are compatible with refuge purposes and appropriate. Hunting was a historic and traditional activity within the area that is now the Great Dismal Swamp NWR. All hunting programs on the refuge are in compliance with state and federal regulations and are monitored annually to evaluate impacts and needs to adjust the program. This evaluation is coordinated with state wildlife agencies as well as other partners and interested parties.

Comment: One reviewer requested an extension of the deer season.

Response: The current refuge deer season is conducted through the month of October, hunting Thursday through Saturday of each week. By the last weekend of the hunt the number of hunters has significantly declined from the number of permits issued. This indicates that the demand for hunting on the refuge significantly declines toward the end of the established season and therefore the demand does not support an extension of the deer season.

Comment: One reviewer feels that there are flaws with the perceived neutral effect of the bear hunt and that we did not consider the affects on off refuge hunting and how the hunt is planned for implementation.

Response: The discussion in the Environmental Consequences Section of the draft CCP for the refuge bear hunt relied heavily upon two studies of the bear population: the Hellgren, 1988 study and the Tredick, 2005 study. The Tredick study found similar densities for black bear in the Great Dismal Swamp NWR as were found in the Hellgren study almost twenty years previously. Based on these two works it appears that the Dismal Swamp black bear population is stable. The limit of a 20 bear harvest for the bear hunt was established and agreed to by US Fish and Wildlife Service (USFWS), Virginia Department of Game and Inland Fisheries (VDGIF), and Virginia Polytechnical Institute and State University(VPI) bear biologists and researchers. Based on the population estimates the 20 bear harvest represent less than 10% of the population. Conducting the hunt in late November also will reduce the pressure on sows/females. This later assumption is based on the reduction of the sow/female harvest in Suffolk and Chesapeake when the VDGIF changed the hunting dates from 1 October, to the statewide bear season starting in late

November. Sow/female harvest declined the first year by more than 90%, where in previous early seasons sows/females made up 75-80% of the harvest. We know from Hellgren (1988) that Dismal Swamp sow/female bears go into dens in late to early November if pregnant, thus removing them from the potential harvestable population and Virginia hunting regulations do not allow the taking of bears in company of cubs, thereby reducing the likelihood of females being harvested. Based on the information available and the opinions of experts consulted this hunt will have limited impacts on the population.

In relation to the hunt implementation, 100 hunters were initially planned to be permitted to hunt only the Railroad Ditch entrance (the Southern Zone). The Refuge felt that 100 hunters in one area may have been too much pressure on the bears using this area. By opening another zone (northern zone) without an increase in potential hunters a reduction in planned hunting pressure on the southern area will result.

Comment: One reviewer would like to see the refuge evaluate turkey numbers, improve habitat where appropriate and have a youth spring gobbler hunt.

Response: The wild turkey is not considered a species of high concern for the Refuge or the USFWS as a whole. It is a species that is typically managed by states game agencies. The wild turkey population has been expanding on the Refuge over the past 20 years and especially in the past decade. We believe that under the current and future vegetation community management, habitat for this species will be available and possibly enhanced within the Refuge.

Youth hunting is an appropriate activity on the refuge and has been identified as a strategy under Goal 4: Hunting Opportunities. A youth turkey hunt can be considered as part of this strategy. Prior to initiating any specific youth hunts a thorough evaluation of impacts from a hunt will be undertaken, both from wildlife management standpoint as well as from a public use point of view.

Comment: VDGIF recommends monitoring deer on the Refuge for signs of Chronic Wasting Disease (CWD). Also recommend that all refuge staff be made aware of the signs of CWD.

Response: Region 5 of the Service completed a Chronic Wasting Plan for the Northeast Region in May 2006. Additionally, as a whole and Region 5 in particular have begun training of all Refuges in monitoring and sampling for CWD. The states of Virginia and North Carolina have also developed CWD plans. The Refuge will continue to monitor CWD and work with the states, as requested, to sample and/or monitor deer herds on both Great Dismal Swamp & Nansemond NWRs.

***Comment:** One reviewer requested a definition of “quality” big game hunting*

Response: Quality hunting generally provides an image of a positive enjoyable experience in the outdoors. A quality hunting experience is one that provides the hunter with ample game animals to pursue, the wildlife is in good health and condition, the habitat conditions are good, there is not overcrowding of other hunters and the opportunity for success is high. A significant part of the quality hunting experience is an opportunity to gain a deeper appreciation and understanding of the land and its wildlife.

***Comment:** VDGIF supports the initiation of a black bear hunt on the refuge with adjustable parameters. They encourage annual review of the program to include VDGIF comments and suggestions.*

Response: Support for the black bear hunt is noted and appreciated. As described in the CCP and the Draft Black Bear Hunt Plan, an annual review of the program will be conducted each year. We will review the program with input from a variety of partners including the VDGIF. All comments and suggestion will be evaluated during the annual review.

***Comment:** One reviewer believes that hunting dogs do not belong on the refuge and the owners of any dogs found on the refuge should be fined.*

Response: We agree that hunting dogs do not belong on the refuge and it is illegal to have free ranging hunting dogs on the refuge. The refuge is surrounded on most sides by private property where use of dogs to hunt deer and bear is legal. These hunting dogs frequently stray onto the refuge. The refuge does issue permits to these hunters to retrieve their dogs. This permit allows the hunter to retrieve their dogs quickly and efficiently and reduces the number of dogs roaming the refuge and harassing wildlife. All hunters found deliberately releasing their hunting dogs on the refuge are cited for this violation of refuge regulations.

***Comment:** One organization requests allowing hunters to use dogs to hunt bears. “This would allow you to control the population as you see fit, because as houndsmen we know the sex of the animal before it is harvested.”*

Response: We acknowledge that hunting bears with dogs is a traditional means of harvesting bears in this part of the country. We agree that the use of dogs is a very efficient means of harvesting animals. Currently the use of dogs to pursue and hunt

on the refuge is prohibited. The use of dogs would also cause unnecessary disturbance to non-target wildlife, control and recapture of dogs can be problematic, and with limited hunt zones within the refuge keeping the bears and dogs confined to these areas would be difficult.

Comment: Will there be biological data collected and maintained from hunter-harvested bears?

Response: Yes. All bear harvests from the refuge will be brought through a refuge check station and data on the animals will be recorded. This data will help add to the overall understanding of the refuge bear population.

Comment: Will the bear hunt build in some controlled scouting days for hunters outside of the actual hunting days?

Response: Yes. As described in the Black Bear Hunt Plan for the refuge, one scouting day will be planned for a Saturday prior to the hunt. We have found that providing a scouting day improves the hunter's success and familiarity with the hunt area.

Comment: One reviewer asked about the 200 deer limit described in the Compatibility Determination for the deer hunt. He states that the actual number that can be removed sustainably may be much higher than 200.

Response: Currently we are annually harvesting less than 200 deer. This is not due to a cap but due to hunter participation. Refuge staff will be reviewing this issue in the near future after the next Abomasal Parasite Count (APC) sampling is conducted. The APC analysis helps to determine health and condition of the deer herd.

Environmental Education

Comment: A couple of comments supported the development of the Environmental Educational Pavilion. One of the individual recommends moving the Educational Pavilion from Jericho Lane to Washington Ditch since this is where most school groups now come.

Response: The draft CCP proposes the placement of the Environmental Education Pavilion at the Jericho Lane entrance due to the centralized access of the site to the school systems of the heavily populated areas to the north, east, and west of the refuge. Activities for day field trips are constrained by the school day schedule and visiting groups often travel more than one hour to reach the refuge. This most northern entrance point will reduce required travel time, allowing more time for on-site activities.

In addition, the Jericho Lane entrance is recognized as being both biologically and historically significant to the refuge's interpretational message. The established trail system will provide a variety of outdoor classroom sites.

Interpretation

***Comment:** One reviewer feels that the refuge does not offer enough recreational opportunities to the public. Hours for weekend availability for public use need to be extended during the spring and fall seasons annually. There is also a need for more environmental education and interpretation opportunities and promoted to an extended audience in both SE Virginia and NE North Carolina to increase the number of participants.*

Response: Currently, opportunities to participate in wildlife dependent recreational opportunities may be somewhat limited. The refuge headquarters has not been open during weekend hours due to limitations of funding and staff. Refuge trails remain open year round, seven days a week, sunrise to sunset. The plan calls for an increase to the visitor services staff from one to seven at full development. With the addition of new staff, there would be an expansion of programs to reach new audiences, provide additional opportunities to enjoy the refuge as well as an increase in environmental education and interpretation programs. The increases to staffing resources will help to facilitate the extension of operating hours at the Visitor Center, Visitor Service Center and Headquarters.

***Comment:** One reviewer recommends partnerships with the DS Coalition, NC Natural Area, DSC Welcome Center, Cities of Suffolk and Chesapeake in expanding the interpretation of cultural history.*

Response: The refuge supports this recommendation. In the near future, a new interpretive panel will be installed that provides information about the Underground Railroad. On going archeological research will continue to provide documentation of reference materials to support relevant interpretation of Great Dismal Swamp cultural history. The refuge will continue to share these resources and work with partners to expand the interpretation of the cultural history of the area.

Comment: *One reviewer recommends the refuge participate in local, regional and national educational opportunities for designated events (Earth Day or Bird Week, etc).*

Response: The refuge does participate to a limited extent in some of these national educational opportunities but due to limited staff and funding we are unable at this time to expand our participation. During 2006 we did participated in a Migratory Bird week event, the Birds and Blossoms Festival in Norfolk, Virginia, and held a National Trails Day event at the refuge. Participation in these events is supported in the CCP under Goal 4/Interpretation/Strategy 5. As we increase our staffing and volunteer program we will expand our participation in these types of events.

Comment: *One reviewer asked if Great Dismal Swamp NWR is on the North Carolina Birding Trail list as a stopping place for birders.*

Response: It is currently not on the list but we are working to get it added. The refuge is a very popular birding location and we would like it added to these types of trails where possible.

Boating

Comment: *One reviewer supported increased boating opportunities but thought that the activity should be monitored during winter months to ensure resting waterfowl are not unduly disturbed.*

Response: The support for increased boating opportunities is noted and appreciated. We share the concern regarding potential disturbance to resting wintering waterfowl. The potential disturbance to waterfowl will be limited since access to Lake Drummond during the winter months is limited to only those boats willing to travel up the Feeder Ditch, a three mile trip to the Lake. Boat access to Lake Drummond from the west side of the refuge is limited to the spring. We will continue to monitor this activity as visitation increases.

Comment: *One reviewer recommends the development of a through-swamp kayak/canoe route – potentially, from Washington Ditch to Lake Drummond and out through the Feeder Ditch. Another option would be along Cross Canal.*

Response: We concur with this recommendation. A new strategy has been added to Goal 4 to consider development and management of a through-swamp canoe/kayak route from Washington Ditch to Lake Drummond to the Feeder Ditch and the

Dismal Swamp Canal. This particular route is well suited for this type of activity because a moderate size parking area is available in close proximity to the Washington Ditch. This route will require two portages to gain access to Lake Drummond. There may be times of the year when adequate water may not be available to successfully navigate the trail but that is the case for most potential routes. Cross Canal is not a viable option since some portions of the canal have deteriorated to the point they are not passable. Additionally, there is no viable parking access for this route. A major concern for any route is clearing downed trees and maintenance of the trail. The refuge will seek to partner with a trail, canoe, kayak or similar group to help address this concern.

***Comment:** One reviewer recommends providing opportunities for guided canoe/kayak interpretive tours by recruiting a private concessionaire to extend usage of the canal, Feeder Ditch and Lake Drummond.*

Response: Comment noted. The plan currently calls for the use of a private concessionaire to provide interpretive boat tours on Lake Drummond. The Compatibility Determination for Concession Operation also addresses providing this type of operation from the east side of the refuge which would naturally extend to the Feeder Ditch and Dismal Swamp Canal.

Visitor Center and Other Facility Improvements

***Comment:** There were many comments regarding the development of the Visitor Center and Refuge Headquarters off of US Highway 17 on the east side of the refuge. Most comments supported this idea but the Suffolk City Council requests that the Service amends the draft CCP to maintain the refuge headquarters within the City of Suffolk and to develop a Visitor Interpretive Center in downtown Suffolk.*

Response: We appreciate the overwhelming support for the development of a Visitor Center for the refuge. We agree that it is a key facility to help take the refuge to the next stage in improvement of environmental education, interpretation, wildlife observation and outreach.

We acknowledge the City of Suffolk's interest in maintaining the Visitor Center and Headquarters within Suffolk. The refuge fully supports Suffolk's plan to develop a Visitor Interpretive Center for the Great Dismal Swamp in downtown Suffolk. We plan on supporting this effort with the development of interpretive panels about the refuge to be included within this city owned and operated facility.

A great deal of thought and consideration went into the planning the location of the Visitor Center and Headquarters' facility for the refuge. The location on US

Highway 17 was chosen due to its proximity to a major transportation corridor. This will help facilitate opportunities to reach a large number of people and to educate the public on the primary educational and interpretive messages for the USFWS, NWRs and the Great Dismal Swamp NWR. The Service and the National Wildlife Refuge System is responsible for managing this refuge which is over 100,000 acres in size that cross state lines and flows through several towns and cities. This ecosystem based refuge is important not to any one single political or geographic jurisdiction but to all of the American people.

Other options were considered but rejected due to complicating issues. The 1979 Public Use Plan recommended a Visitor Center, Refuge Headquarters and Maintenance Complex near the Washington Ditch entrance on the west side of the refuge. After review, this site it was determined not to be a preferred location due to wetland impacts. In order to provide sufficient area to build the identified structures, we would need to fill wetlands, which is not an option we are willing to consider. There could also be a significant impact to identified cultural resource sites in the area.

The City of Suffolk requested that the Headquarters be maintained in Suffolk. Combining the headquarter facility with the Visitor Center reduces the need for the development, maintenance, and additional resources to support a separate facility. The most economical approach is to combine facilities where possible. Therefore, the combination of the Headquarters with the Visitor Center facility on US Highway 17 continues to be the best option for the refuge.

Comments: The City of Chesapeake, Virginia supports the Visitor Center on Highway 17 and suggests a partnership to build a portion of the facility to house a ranger station, office space and equipment to support the Dismal Swamp Canal Trail (a city park). Local colleges and universities have expressed interest in providing facilities for scientific research, laboratories, classroom, and astronomy/observatory uses at the Visitor Center location. This joint use can ultimately provide cost savings and multiple benefits to the refuge, the Hampton Roads region, the City of Chesapeake and various colleges and universities.

Response: The refuge appreciates the support of the City of Chesapeake in the development of a new Visitor Center and Headquarters facility on the refuge in Chesapeake. A partnership with the City as well as other interested parties is encouraged and supported in the development of this important facility. As we move forward with this project, refuge staff will work closely with all interested parties to develop a vision for the facility that supports the mission of the USFWS, the NWRs, the purpose for which the Great Dismal Swamp NWR was established as well as the vision and goals for the refuge. We will investigate opportunities to share resources and develop shared facility space that complements the purpose of the facility and

mutual goals and needs. The Service looks forward to developing these partnerships and sees them as a key to future of Great Dismal Swamp NWR.

Comment: One reviewer supports the development of the Sunbury Visitor Contact Station (VCS) even in light of the deterioration of the Sunbury School, the proposed location for the VCS.

Response: We concur with this recommendation. The original proposal was to establish a Visitor Contact Station for the refuge in an old school in Sunbury, North Carolina. Since the original proposal the Sunbury school building has deteriorated to the point that rehabilitation of the facility is not an option. Even though this plan is no longer a viable option, there is still a need to develop a Visitor Contact Station in Sunbury near the intersection of Hwy 158 and Hwy 32 in Gates County. This proposal will remain in the plan.

Comment: There were several comments relating to road/trail improvements. Most of the comments felt that paving was not needed on most of the roads. One reviewer wants to know what are considered environmentally friendly paving materials and finally, one reviewer wants to see no new roads.

Response: There has been considerable concern voiced about paving roads/trails within the refuge, many of which are supported by refuge staff. Based upon the concerns voiced by reviewers and refuge staff, the paving proposal has been changed to minimize paving to only critical need areas that are most suited to paving or other types of road stabilizing substances. The sites that will be considered for paving are those on stable mineral soils. The plan will be modified to reflect that only portions of Jericho Ditch Lane and Washington Ditch will be considered for road stabilization. This eliminates the proposals for paving the auto-tour route and the Railroad Ditch access to Lake Drummond.

The term environmentally friendly paving material was used to reflect that there is a large range of options available for road stabilization. These range from traditional petroleum based paving materials to materials that have fewer environmental impacts. The refuge will utilize road stabilization methods that pose the lowest level of impacts to the resource but have been proven effective. An evaluation of available products will be conducted prior to the initiation of these projects.

Finally, only one new road is proposed, and that is the road to connect the Visitor Service Center to the Railroad Ditch entrance. We proposed this access road to address a traffic safety issues. Currently access to Railroad Ditch off of Desert Road is along a dangerous curve. By providing a short connector road from the existing

parking lot to Railroad Ditch access safety problems will be reduced. This new road will be built on mineral soils and wetlands are not likely to be impacted.

Comment: One reviewer found a contradiction between the description of the proposed Feeder Ditch Trail and the cost analysis.

Response: The reviewer noted that the description in the plan for the Feeder Ditch Trail described a trail along the spoil levee with only sections of boardwalk to bridge ditches or other wetland areas while the cost analysis for the trail project estimate was based upon the entire trail being boardwalked. The cost analysis has been modified to reflect the description.

Comment: One reviewer would like to see more resources to provide improvements and safety for visitors at the main entrance areas and other areas posted as closed.

Response: We agree that resources should be focused at the primary refuge entrances (Jericho, Washington, Railroad and the Headquarters) to provide improved visitor information, interpretation, and safety. These entrances will continue to be the focus until we have the funding and resources to support the improvement and development of additional entrances. Although we will continue to focus visitors at these primary entrances, allowing access at other entrance points provides a different type of experience to those visitors interested in a more solitary experience.

Comment: The Culpepper Landing subdivision plans an extensive trail system within the development that hopes to connect into the wildlife refuge. The development of this trail system highlights the need to improve the trail system along Big Entry Ditch and Portsmouth Ditch within the refuge. Two reviewers request access to the refuge through this new subdivision and one asked if there were plans to make Portsmouth Ditch entrance more accessible.

Response: The Culpepper Landing subdivision is still in the early planning phase of the development. Detailed discussion with the developer and the City of Chesapeake will need to take place before a decision can be made regarding the development of a new entrance within this development. Not far from the planned development is the existing Portsmouth Ditch entrance (off Martin Johnson Road). This entrance is currently undeveloped. Resources may be limited in future years and the refuge will only be able to support one entrance in the northeastern quadrant of the refuge. A complete evaluation will need to be made as to which entrance would best support the purpose and mission of the refuge. Until this evaluation is completed no decision will be made on this recommendation.

Comment: One reviewer supported visitor access on the east side of the refuge but that there is also a need for facilities to accommodate access on the west side.

Response: The overall vision of the plan is to provide a variety of visitor access points. The plan identifies an access trail along the Feeder Ditch from the east side of the refuge but will also maintain and enhance existing access points on the west side of the refuge. These access points include Jericho Lane, Washington Ditch, Railroad Ditch and in the future Corapeake Ditch.

Comment: There were a couple of comments wanting to know if the planned pedestrian bridge across the Dismal Swamp Canal will disrupt vessel traffic.

Response: The planned pedestrian bridge across the Dismal Swamp Canal will not disrupt vessel traffic. Vessel traffic will always have priority over pedestrian traffic. The plan is to have a moveable bridge that will be moved into place only during pedestrian crossings to the refuge. If there is vessel traffic in the canal at the same time that pedestrians wish to cross, the vessel traffic will have priority and the pedestrian traffic will wait until the vessels have cleared the area.

Comment: One reviewer requests handicap access into the swamp.

Response: Access into the refuge for disabled visitors is currently available. Accessible access is available at the Railroad Ditch entrance that is open to vehicle traffic. Along this route is a newly constructed boardwalk trail that is accessible. Washington Ditch entrance is also useable by some wheelchairs. We will be evaluating the gate bypass at Washington Ditch to ensure that all wheelchairs can gain access around the gate and to the boardwalk area. Finally, we currently have a designated hunt area for disabled hunters during the deer hunt. Refuge staff will continue to evaluate better ways to improve accessibility.

Comment: There was a great deal of confusion voiced at the public meetings as well as a few written comments regarding the use of a concessionaire operation on the refuge and the misconception that they will be a here to sell food and drinks.

Response: The term concessionaire here refers to a private business that operates on behalf of the USFWS. Most people think of concession stands at sporting events, many of which sell food. The refuge is interested in working with a private company or other partner that will come into the refuge to provide many services that refuge staff is unable to provide with existing staff. The concessionaire will provide guided hiking, biking, vehicle and boat tours, visitor information, some interpretive

presentation, and operate a bookstore/gift store. Language in the CCP has been modified to clear up this misconception.

Access

Comment: A couple of reviewers supported allowing horseback riding as a means of accessing the refuge. “This will increase your base of support throughout the region and many more people would perhaps become educated on all that the preserve offers.”

Response: As initially stated in the Draft CCP, horseback riding is an activity that was considered but eliminated from further consideration. This activity is not a priority wildlife-dependent public use nor is it necessary to support the safe, practical, and effective conduct of priority wildlife-dependent public uses.

Horseback riding presents significant concerns regarding impacts to road maintenance, possible introduction of exotic plants from horse manure, and impacts to water quality. Additional complications would be encountered due to lack of adequate parking for trailers and our limited ability to expand parking areas in a mainly wetland refuge.

Opportunities for horseback riding in the area have recently been developed in the area that provides a similar experience within the historic Dismal Swamp ecosystem. The Dismal Swamp Canal Trail in Chesapeake, Virginia, is a multi-use trail that is open for horseback riding.

To summarize, although interest has been expressed for the refuge to develop horse trails, we have concluded that horseback riding is not a practical or appropriate means of access to the refuge, based upon the management constraints that would be required to accommodate horseback riding to avoid conflicts with existing refuge activities and concerns over environmental and maintenance impacts.

Miscellaneous

Comment: One reviewer commented that several important references were omitted from the listed references.

Response: Comment noted. Appropriate changes to the Referenced literature will be made.

Comment: One reviewer would like to see added to the plan a system of communication for the visitor in need of emergency aid.

Response: We agree that at times the limited emergency communications can pose significant concerns. The refuge ensures that interested visitors are aware that cell phone reception on the refuge is limited. Refuge resources limit our ability to develop a major communications system. We are dependent upon private cell phone/communications companies to improve the coverage for the area.

Comment: One reviewer requests improvements along the Dismal Swamp Canal that include selective thinning of trees, bulkheading select areas, removal of undergrowth on the east bank, and dredging the canal to remove sunken trees and limbs.

Response: The Dismal Swamp Canal is not within the boundary of the Great Dismal Swamp NWR. The Canal and immediate canal banks are owned and managed by the U. S. Army Corps of Engineers (USACOE), Norfolk Division. Any requests for improvements along the Canal should be directed to the USACOE. This is outside the authority of the U.S. Fish and Wildlife Service and the refuge.

Comment: Virginia Department of Environmental Quality as well as several other state agencies provided specific regulatory information and coordination needs for the implementation of the preferred alternative. They asked that the Service coordinate with them on any impacts that the Preferred Alternative will have as specific plans are developed.

Response: All activities initiated through the preferred alternative that are covered by state regulatory requirements will be reviewed prior to implementation. All required permits and consultation will be coordinated and applied for through the appropriate agencies as specific projects are undertaken.

Comment: One reviewer sees a need for additional law enforcement for the leased area for primitive camping at the Feeder Ditch as well as on the roads at the refuge.

Response: We concur with this need. Currently the refuge has one full time Law Enforcement Office and one Dual Function Officer for visitor and resource protection. The draft plan calls for the addition of one more full-time officer. The refuge will continue to work with officers from neighboring refuges to address special needs.

Comment: One reviewer commented that the plan fails to give dates for the replacement vehicles.

Response: The table listing the Maintenance Management System Projects was designed to be a brief listing of maintenance needs and not a comprehensive listing of these projects. Additional information from this database has been included in the table to provide more details regarding the replacement of these vehicles.

Nansemond NWR

Comment: One reviewer supports co-management of the refuge and recommends that Virginia Department of Game and Inland Fisheries be the partner.

Response: Comment noted. There are many potential partners to assist in the management of the Nansemond National Wildlife Refuge. VDGIF would be a good partner for the management of this resource. Upon finalization of the CCP, refuge staff will begin to explore these potential partners.

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