

and maintaining access roads; creating and maintaining parking areas; providing fishing brochures and maintaining our web site to explain fishing regulations and describe permitted activities; constructing a non-motorized boat launch, restroom, and fishing pier at the Hutchinson Tract; purchasing and installing kiosks at the Hutchinson and Laurel Grove tracts; designing and producing panels to provide fishing regulations; and monitoring of the fisheries at the Wilna and Laurel Grove ponds.

Funding for visitor improvements comes from a variety of sources including general management capability funds, challenge cost share projects, grant funds, contributions, and special project funds. We will complete and maintain projects and facilities as funds become available and will use volunteers and partners to help in construction and maintenance.

Over the past five years, approximately \$275,000 has been allocated from special project funds to create infrastructure at the Wilna Pond site. We have \$1 million available from Federal Highway Administration funding to upgrade refuge roads in 2008, including roads at the Hutchinson, Wilna, and Tayloe tracts. In 2007, \$310,000 was allocated for visitor enhancements at the Hutchinson Tract. An additional \$10,000 for portions of the Hutchinson Tract project was received from donations and a Chesapeake Gateways grant. Sufficient staff and maintenance funding within our base budget of nearly \$850,000 is available to make annual progress toward completion of all the projects described above and to maintain those already completed.

Anticipated Impacts on Refuge Purpose: The activities proposed herein are supported by the goals and objectives of the refuge's Draft CCP. Providing compatible wildlife-dependent recreation and education is common to all alternatives listed in the CCP. The Service's preferred alternative lists the following goal related to visitor use of the refuge:

Goal 4: Promote enjoyment and stewardship of our Nation's natural resources by providing quality, wildlife-dependent recreation and education opportunities on refuge lands and waters.

Alternative B, Goal 4, Objective 4.4, Recreational Fishing, relates to this determination.

As noted on page one of this compatibility determination, there are four purposes for establishment and management of this refuge. In general, they relate to four primary conservation and management responsibilities:

1. Migratory birds,
2. Threatened and endangered plant and animal species,
3. Wetlands, and
4. Other fish and wildlife resources.

Following is a discussion on the anticipated impacts of the proposed uses related to the resources listed within refuge purposes.

Potential impacts to birds: An indirect benefit to upland habitats and associated species would derive from careful, strategic management of this fishing program. Public awareness and appreciation of the refuge, its habitats, and resources would inspire some to volunteer or in other ways support the refuge needs and conservation of resources on the landscape in general.

Recreational Fishing

Increases in annual visitor numbers during the daytime (public use sites would be open only from official sunrise to sunset) will surely result from replacing the fishing pier at Hutchinson, constructing parking areas, installing informational kiosks, and other planned activities described herein, although it is difficult to predict a frequency or rate. Visitors at these sites may flush rafting waterfowl or eagles hunting the marshes within view of a trail, launch or pier, although we anticipate that in the winter public use at these locations would be moderate, at least in the early years after opening. Higher rates of public use would occur during the warmer months, when most waterfowl are on northern breeding grounds. Wetland species likely to be disturbed and flushed during the warmer months include bald eagle (fewer than in winter), belted kingfisher, mallard, great blue heron, and basking turtles. The sites are not particularly sensitive, rare, or in close proximity to nest areas, and there are protected and secluded areas nearby where disturbed wildlife can repair to. Disturbance is therefore anticipated to be minor, temporary, and infrequent.

Paths from parking areas to fishing access have the potential to disturb forest interior dwelling bird species at the Laurel Grove and Hutchinson tracts. Direct impacts on wildlife in the form of disturbance can be expected wherever humans have access to an area, and the degree may vary depending on the habitat type. In general, human presence disturbs most wildlife, which typically results in a temporary displacement without long-term effects on individuals or populations. Some species, such as wood thrush, will avoid areas frequented by people, such as developed trails and structures, while other species, particularly highly social species such as eastern tufted titmouse, Carolina chickadee, or Carolina wren, seem unaffected or even drawn to a human presence. When visitors approach too closely to nests, they may cause the adult bird to flush exposing the eggs to weather events or predators. Provided that visitor use is confined to designated areas, disturbance during the breeding season will be limited to those areas. Overall, direct impacts from access to fishing areas would be greatly reduced if facilities avoid area-sensitive habitats (interiors of grasslands and forests) and are confined to a 300-foot edge zone, which is what we plan to implement.

A potential direct negative impact exists for wetland and open waterbird species (such as osprey, herons, and waterfowl) from lost fishing gear; specifically, hooks, lures, and litter, or becoming entangled in fishing line or hooks. Ingestion of lead sinkers is another source of concern throughout the region, but use of lead sinkers is not permitted at the refuge. The extent to which these bird species are impacted by fishing tackle currently is unknown. We will continue to work with our fisheries assistance office and the State in implementing a public education and outreach program on these issues. Increased law enforcement is also planned.

Potential impacts to threatened and endangered species: Despite their removal in 2006 from the Federal List of Endangered and Threatened Species, we included bald eagles in this section due to the fact they were a focal species during refuge establishment and because of the extra protection they are afforded under the Bald and Golden Eagle Protection and Migratory Bird Acts. The only federal-threatened species confirmed to exist on the refuge is the sensitive joint-vetch.

Permitting public access to any waterfront or marsh managed by the refuge holds the possibility of impacting bald eagles or sensitive joint vetch. Impacts may either be displacement or

temporary disturbance depending extent of use of a given site by visitors and eagles. The improvements planned for the fishing program will not impact sensitive joint vetch. However, bald eagles use the trees along Mount Landing Creek (Hutchinson Tract), Laurel Grove Pond, and Wilna Pond, but not in high concentrations. The shoreline at Toby's Point is located in a concentration area. As trees mature and forest riparian buffers are improved, sites with low concentrations will likely increase in importance to bald eagles.

We will avoid potential adverse impacts to bald eagles by strictly following the management guidelines developed in consultation with the Virginia Department of Game and Inland Fisheries and the Center for Conservation Biology. These include sight and distance setbacks from nests and concentration areas, and time-of-year restrictions.

Potential impacts to wetlands: Potential adverse impacts to wetlands could arise if facilities were improperly placed in wetland habitats, if public use were allowed to occur directly in wetlands, or if erosion of sediments into wetlands was allowed to occur during facility construction.

The only facilities proposed for construction in wetlands are the pier and canoe/kayak launch at the Hutchinson Tract. Together, construction of these facilities will cause temporary and minimal (less than 0.01 acre) impacts to wetlands. We will employ silt fencing and other best management practices during construction of any facilities in proximity of wetlands to avoid runoff of sediments.

Many of our interpretive messages included on kiosk panels remind visitors of the importance of wetlands and the many beneficial functions they provide to society, including wildlife habitat, flood protection, groundwater recharge and nutrient uptake.

Potential impacts to other fish and wildlife: Direct impacts on wildlife in the form of disturbance can be expected wherever humans have access to an area, and the degree may vary depending on the habitat type. In general, human presence disturbs most wildlife, which typically results in a temporary displacement without long-term effects on individuals or populations.

Major concerns of any refuge fishing program are accidental or deliberate introductions of non-native fish (used for bait), accidental introduction of invasive plants, pathogens, or exotic invertebrates attached to fishing boats, and over-harvesting. The refuge does not permit use of live minnows in order to prevent the likelihood of introductions of non-native fish. Another common concern is the reduction or alteration of prey base important to fish-eating wildlife. Refuge-specific regulations address this concern by limiting bass fishing to catch and release only at Wilna and Laurel Grove ponds. The current fishing program of the refuge follows the Virginia state regulations and would adopt any State harvest limits that should become applicable to the fish species in these ponds. These limits are set to ensure that harvest levels do not cumulatively impact native fish resources to the point they are no longer self-sustainable. We also follow recommendations of Service fisheries biologists who conduct periodic sampling of refuge ponds. We plan to continue to work with State conservation officers in implementing a public education and outreach program, and increased law enforcement is also planned to address the above concerns.

Mammals in Virginia occupy a diverse array of habitat types, ecological niches and food webs and play an important role in the ecosystems in the refuge boundary. As a taxonomic group, mammals will also benefit from the refuge land protection and management actions relative to riparian habitats, forests, grasslands, shrub, and wetlands proposed for listed species, waterfowl, and migratory birds. Likewise, the refuge will benefit from careful attention to the impacts to mammals resulting from any of its activities. We evaluated the management actions proposed for this use for their potential to benefit or adversely affect large and small, aerial, terrestrial, and wetland mammals and believe that they should have no long-term impact on mammal use of the refuge.

Protection and good stewardship of the area's herpetofauna is another priority of the refuge, and fits into nearly all the goals for wetlands, uplands, and riparian habitats. We evaluated the public uses described herein for their potential to benefit or adversely affect amphibians and reptiles or their habitats used for mating, reproduction, over-wintering, and foraging. Although most species that occur on the refuge are very common and widespread, there is concern for two species of turtle: eastern box and spotted turtles. In addition, amphibians everywhere are considered to be experiencing a general decline. Some areas are experiencing loss of mixed mature forest due to development or high rates of conversion to timber farms. This impacts vernal pools needed by amphibians for over-wintering and reproduction. No vernal pools will be impacted by these proposed activities. Public outreach and education efforts by the refuge that emphasize buffering of wetlands, connectivity and easy access between forest, grassland, and wetlands, protection of vernal pools, and augmentation of patch size will benefit amphibians and reptiles on an even larger scale where embraced by other landowners.

Sometimes maintenance actions for public use may involve preparations or outcomes that have direct negative impacts to amphibians and reptiles. Mowing of grassy access roads and public use trails that lead to these proposed fishing areas occasionally destroys turtles, snakes or frogs if conducted during times of movement (warm months). The best way to minimize this direct type of negative impact is to keep public use and access roads mowed short so that they do not become attractive habitat. However, in many cases it will be impossible to find a perfect time to carry out maintenance actions that will completely avoid conflict for wildlife.

Construction of gravel parking areas and trails leading to the fishing areas pose the potential threat of blocking access between different habitat types, depending on the placement, length, width, and substrate material of the lot and trails leading to the fishing sites. Some salamander species will not cross openings that are too wide or dry, bare ground (Vinson 1998), thus earthen trails, if exposed to sunlight could become dry enough to form a barrier. Gravel roads or trails, even though permeable, may also act as a barrier to salamander movement (Marsh et al. 2005). The planned graveled trails and parking areas are for wheelchair access and will therefore be located on level terrain, avoiding ravines which are home to amphibians and reptiles. At most these trails will be five miles in length on four tracts, and their widths no more than six feet. Other walking trails will be simple cleared paths and perhaps mulched in some locations, but these too will avoid moist ravines close to amphibian habitat.

Disturbance to basking or nesting turtles may occur where public use is concentrated at points where land and water interface. Basking turtles can usually find alternate resting surfaces. Nesting turtles, once engaged in the act of digging usually will not allow their attention to be

drawn to anything else, and at such time are vulnerable to predators. A turtle wishing to make landfall to attempt egg-laying however, may be dissuaded by the presence of humans at the site. Because there will be ample wetland-forest-grassland interface elsewhere, we expect that the cumulative impact of parking lots, roads, and trails to amphibians and reptiles at the landscape scale will be insignificant.

In summary, our research, observations and knowledge of the area provide no evidence that cumulatively, the visitor activities we propose to allow will have an unacceptable effect on wildlife resources or their habitats. We do not expect a substantial increase in the cumulative effects of visitor use from this program. Refuge staff will monitor and evaluate the effects of visitor use, in collaboration with state agencies and partners, to discern and respond to unacceptable impacts on wildlife or habitats.

Public Review and Comment: This determination will be available for a public review and comment period in conjunction with the release of the Draft CCP and Environmental Assessment for the refuge.

Determination (check one below):

- _____ **Use is Not Compatible**
- X **Use is Compatible With the Following Stipulations**

Stipulations Necessary to Ensure Compatibility:

1. All activities will comply with the Bald Eagle Protection Guidelines for Virginia, jointly developed by the U.S. Fish and Wildlife Service and the Virginia Department of Game and Inland Fisheries, in consultation with the Center for Conservation Biology.
2. Results of the fishing program will be reviewed annually to ensure that the program contributes to refuge objectives in managing quality fisheries and protecting habitats.
3. Lead sinkers and other lead tackle will be prohibited to prevent ingestion, and possible lead poisoning, by wildlife.
4. Fishing will be permitted only in designated areas to prevent erosion and degradation of wetlands and water quality.
5. Fishing will follow all State regulations as well as tract-specific refuge regulations.

Justification: Fishing is one of the six priority public uses of the National Wildlife Refuge System and have been determined to be a compatible activity on hundreds of other refuges nationwide. The Refuge System Improvement Act of 1997 instructs refuge managers to seek ways to accommodate these six activities. The refuge properties described in this determination offer a wide variety of habitats and compatible wildlife-dependent recreational opportunities.

Recreational Fishing

Impacts from this proposal, both short-term and long-term, direct, indirect, and cumulative, are expected to be minor and are not expected to diminish the value of the refuge for its stated purposes. The area affected by the proposed use represents a small fraction of the refuge land area. Available parking and size of the facilities will typically limit use at any given time, except during special events. Monitoring the health and continued sustainability of the fisheries at Wilna and Laurel Grove ponds will provide a basis for future recommendations to ensure the continued productivity of refuge habitats.

In accordance with 50 CFR 26.41, opening the Rappahannock River Valley National Wildlife Refuge to fishing, as described herein, will not materially interfere with, or detract from, the fulfillment of the National Wildlife Refuge System mission or the purposes for which the refuge was established.

References:

Commonwealth of Virginia, Department of Conservation and Recreation, Division of Planning and Recreation Resources. 2002. *Virginia Outdoors Plan*. 445pp.

Galvez, John I. and Swihart, Gary L. 2000. *Assessment of Fishery Resources and Water Quality Parameters at Lake Wilna – Rappahannock River Valley National Wildlife Refuge, Virginia*. U.S. Fish and Wildlife Service Office of Fishery Assistance, Gloucester, Virginia. 26pp.

Marsh, D.M., G.S. Milam, Gorham, N.P. N.G. Beckman. 2005. Forest roads as partial barriers to terrestrial salamander movement. *Conservation Biology*. 19:6, 2004-2008.

Moss, Lisa. 2007. *Fishing and Aquatic Resources Management Plan, Rappahannock River Valley National Wildlife Refuge, Laurel Grove, Farnham, Virginia*. U.S. Fish and Wildlife Service Gloucester Fishery Resources Office, Charles City, Virginia.

USGS. 2007. Draft Community Survey Results for Rappahannock River Valley National Wildlife Refuge: Completion Report.

Vinson, M. 1998. Effects of recreational activities on declining anuran species in the John Muir Wilderness, CA. Missoula, MT: University of Montana. 83 p. Thesis.

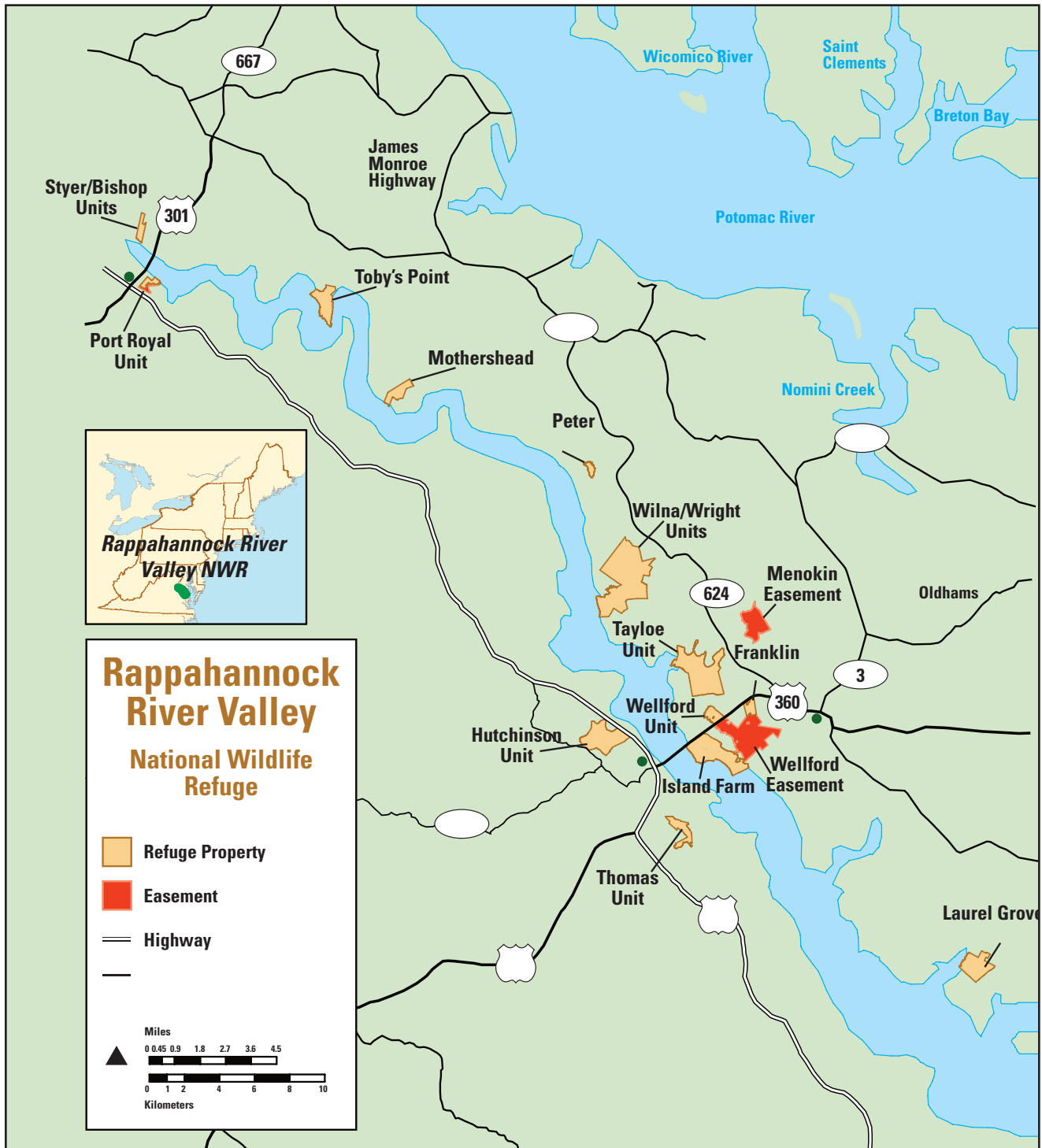
Virginia Department of Conservation and Recreation. 2007. Draft Virginia Outdoors Plan http://www.dcr.virginia.gov/recreational_planning/vop.html

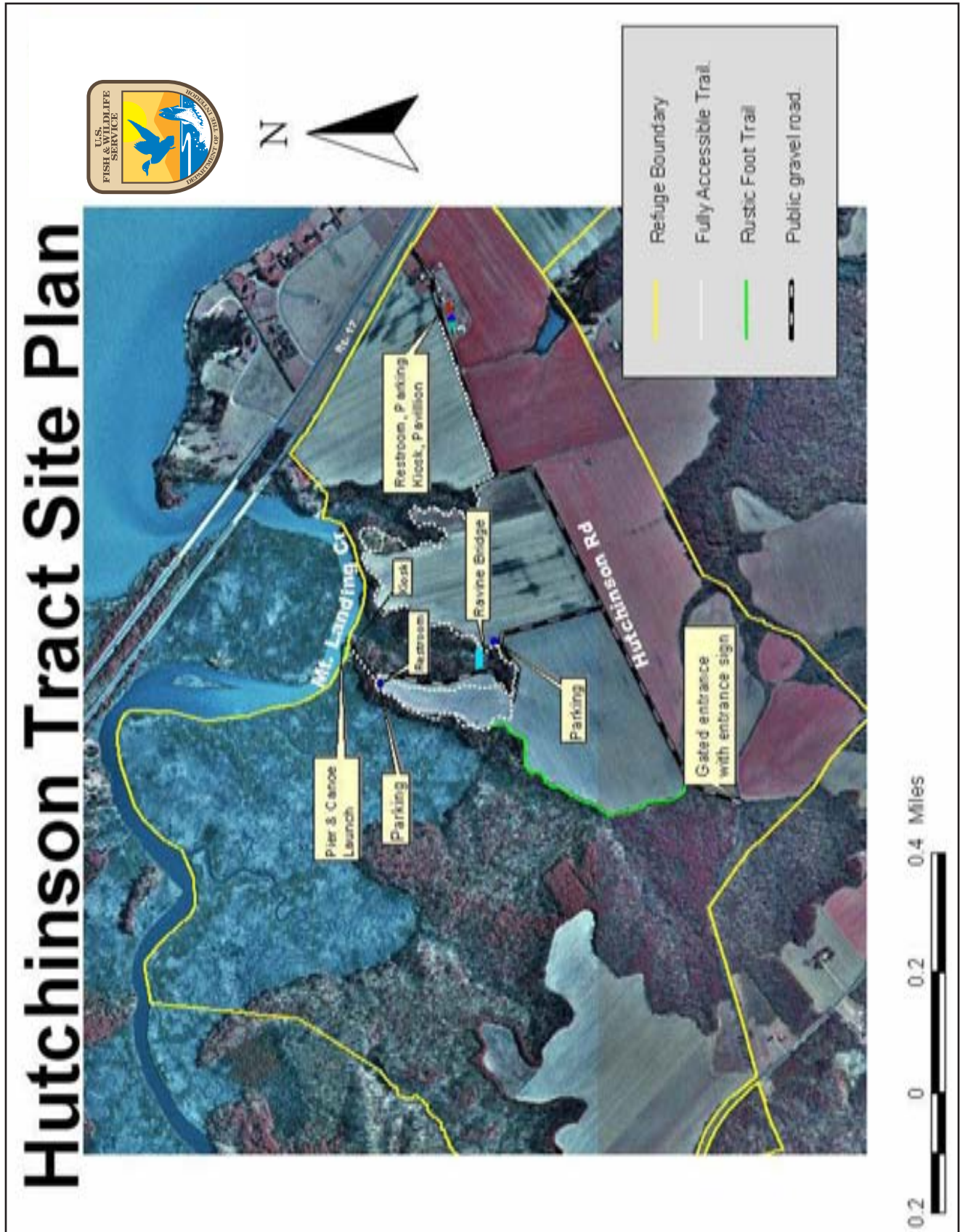
Signature: Refuge Manager: _____
(Signature and Date) D

Concurrence: Regional Chief: _____
(Signature and Date) D

Mandatory 15-year Re-evaluation Date: _____

Recreational Fishing





FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Rappahannock River Valley NWR

Use: Cooperative Farming

This form is not required for wildlife-dependent recreational uses, 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, 603 FW 1, 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: Joseph F. Van Causley

Date: December 2, 2006

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: Joe P. Smith

Date: 1/10/07

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

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02/06