

## Appendix D



Cyrus Brame/USFWS

*River escarpment tree planting*

# Wilderness Review

## Wilderness Review for Presquile National Wildlife Refuge

This appendix summarizes the wilderness review for the 1,329-acre Presquile National Wildlife Refuge (NWR, refuge). Presquile NWR is an island in the James River located in Chesterfield County, Virginia (map D-1). The purpose of a wilderness review is to identify and recommend for congressional designation National Wildlife Refuge System (Refuge System) lands and waters that merit inclusion into the National Wilderness Preservation System. Wilderness reviews are a required element of comprehensive conservation plans (CCPs) and conducted in accordance with the refuge planning process outlined in 602 FW 1 and 3, including interagency, public, and Tribal involvement, and National Environmental Policy Act (NEPA) compliance.

There are three phases to the wilderness review process: (1) inventory, (2) study, and (3) recommendation. In the inventory phase, lands and waters that meet the minimum criteria (described below) for wilderness are identified. Areas meeting these criteria are called wilderness study areas (WSAs). In the study phase, we evaluate WSAs to determine if they are suitable for wilderness designation, including an assessment of whether the WSA can be effectively managed as wilderness. In the recommendation phase, we use the findings of the study to determine if we will recommend a WSA for wilderness in the final CCP. We detail our wilderness recommendations from the Director of the Service, through the Secretary of the Interior and the President to Congress, in a wilderness study report. Congress has the authority to make final decisions on wilderness designation.

Areas recommended for designation are managed to maintain wilderness character in accordance with the management goals, objectives, and strategies outlined in the final CCP. That management direction will continue until Congress makes a decision, or until the CCP is amended to modify or remove the wilderness proposal.

In evaluating wilderness potential for Presquile NWR, we determined during the inventory phase that the minimum criteria were not met and therefore did not proceed with the study or recommendation phases. The result our inventory is presented below.

### Wilderness Inventory

The wilderness inventory is a broad look at refuge lands to identify WSAs. Only those refuge lands owned in fee title are considered. WSAs must meet the minimum criteria for wilderness identified in section 2 (c) of the Wilderness Act which are: size, naturalness, and opportunities for solitude or primitive recreation. Other supplemental values are evaluated, but not required. We evaluate areas and identify WSAs using those same criteria. Our inventory of this island-refuge, and the application of the wilderness criteria, are discussed below.

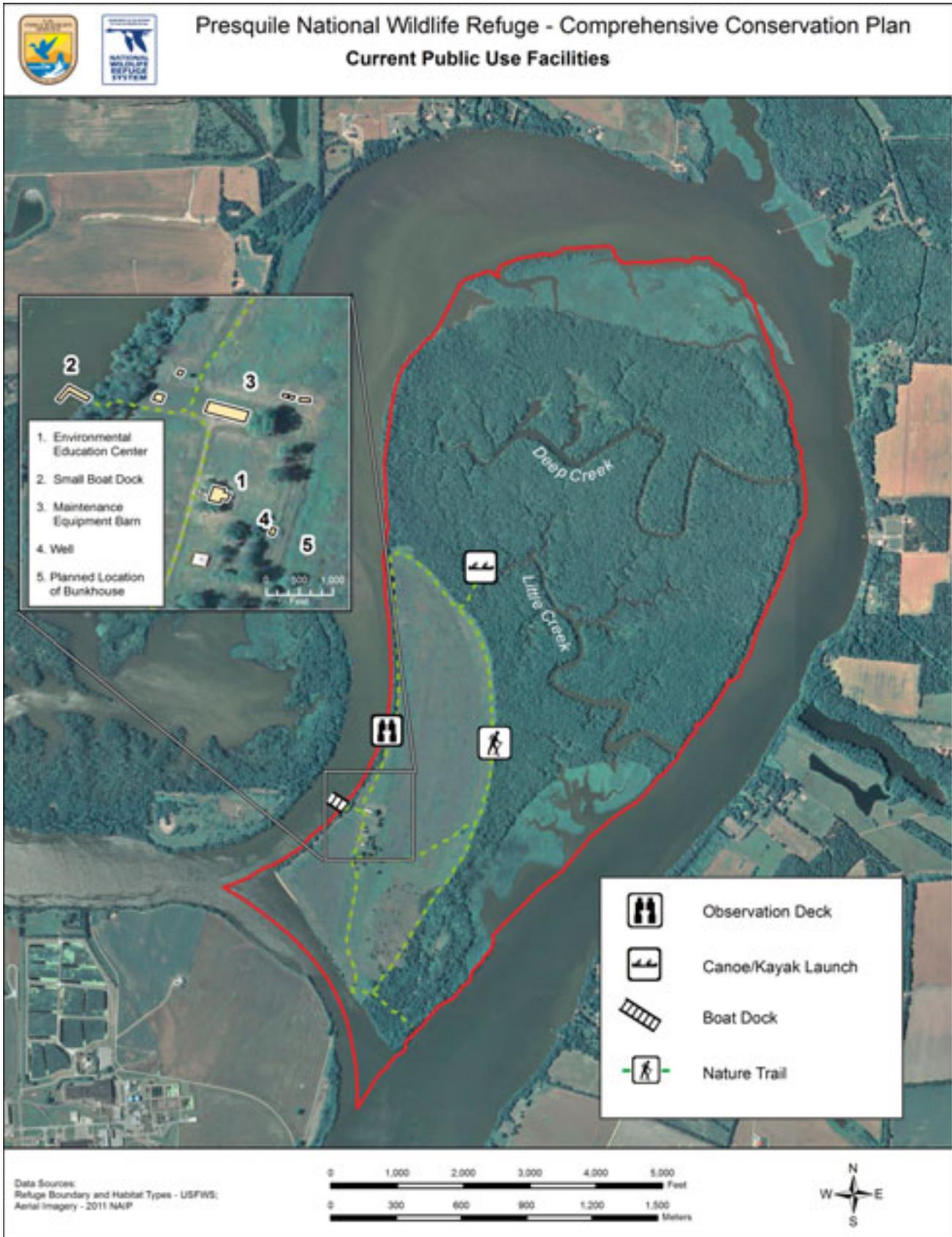
#### Evaluation of the Size Criteria

To evaluate the size criteria, we review every roadless area of 5,000 contiguous acres or more, and every roadless island. "Roadless" refers to the absence of improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.

The Service has interpreted the size criteria to be satisfied under the following situations:

- An area with over 5,000 contiguous acres. State and private lands are not included in making this acreage determination.
- A roadless island of any size. A roadless island is defined as an area surrounded by permanent waters or that is markedly distinguished from the surrounding lands by topographical or ecological features. We interpret a "road" to be something that is improved and maintained for legal street vehicles and for public travel.
- An area of less than 5,000 contiguous Federal acres that is of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management.
- An area of less than 5,000 contiguous Federal acres that is contiguous with a designated wilderness, recommended wilderness, or area under wilderness review by another Federal wilderness managing agency such as the Forest Service, National Park Service, or Bureau of Land Management.

Map D.1 Current Public Use Facilities on Presquile NWR



**Conclusion:** We have determined that Presquile NWR meets the size criteria due to the fact it is a roadless island, surrounded by the James River. An unimproved, grass-surface road exists for administrative use to allow staff, or a designee, to shuttle equipment and supplies from two refuge boat landings. Occasionally, vehicles also travel along the grass trails or across the old fields to distribute equipment and supplies, or to conduct management activities. However, there are no improved roads on the refuge, and public traffic is not allowed.

### Evaluation of Naturalness Criteria

To evaluate the naturalness criteria, we use the definition in section 2 (c) of the Wilderness Act that the area "... generally appears to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable." The area must appear natural to the average visitor rather than "pristine." The presence of historic landscape conditions is not required. An area may include some human impacts provided they are substantially unnoticeable in the unit as a whole. Significant human-caused hazards, such as the presence of unexploded ordnance from military activity, and the physical impacts of refuge management facilities and activities are also considered in evaluation of the naturalness criteria. An area may not be considered unnatural in appearance solely on the basis of the "sights and sounds" of human impacts and activities outside the boundary of the unit.

The cumulative effects of these factors in conjunction with refuge size and physiographic and vegetative characteristics were considered in the evaluation of naturalness for the refuge.

**Conclusion:** We have determined that Presquile NWR does not meet the naturalness criteria for several reasons. First, there are a number of facilities on the refuge (most are noted on map D-1).

They include the following cluster of facilities on about a 4-acre area of the refuge's uplands:

- A large, open-stall equipment storage barn (approximately 4,550 square feet);
- An education center (a one-story former residence, approximately 1,000 square feet);
- Five additional small outbuildings; and
- A planned bunkhouse to serve as an overnight facility for educational programs (approximately 1,750 square feet; capacity is approximately 36 people).

Public access to the refuge primarily occurs via the main boat landing which includes:

- A 30 by 8-foot floating dock, with a 20 by 4-foot aluminum gangway, attached to a pier with pilings and treated wood. The pier is 85 feet long and approximately 6 feet wide.
- Via a short ramp, the dock is attached to an elevated boardwalk that is approximately 60 feet long. The elevated boardwalk grades up to the refuge's uplands in proximity of the facilities noted above.

Visitor facilities on the refuge (located on map D-1) include:

- An elevated wooden viewing platform approximately 10 feet high;
- A 550 feet boardwalk, approximately 4 feet wide, made of recycled plastic and supported by metal 4 by 6-foot framing, extends out into the tidal wetlands;
- A small wooden pavilion/kiosk with shingled roof, approximately 15 by 15 foot, sits off the boardwalk and holds approximately 15 to 20 people and storage for paddles and vests; and
- A floating dock and ramp extend out from the end of the boardwalk. The dock is approximately 8 by 10 feet, and the ramp is approximately 4 by 10 feet.

Administrative access also occurs via a cable ferry that crosses from the mainland to a ramp in the southeast corner of the refuge. That ramp consists of:

- An iron frame over the water, approximately 20 feet wide by 35 feet long (see figure D-1); and
- Hoists and pilings approximately 20 feet tall by 30 feet wide are attached to the frame.

Another reason the refuge does not meet the "naturalness" criteria is because approximately 18 percent (or 234 acres) of the refuge's uplands is old agricultural field which was grazed and farmed as recently as 12

years ago, and is infested with Johnsongrass and other exotic plants. Johnsongrass, which was introduced as a livestock forage decades ago, is an invasive alien species with prolific seeding capabilities, is listed as “noxious” in Virginia, and is therefore subject to mandatory control established by county ordinance. Most visitors to the refuge from the surrounding agricultural region know this plant is invasive and a major problem. They understand its destructive impact on both native vegetation and desirable agricultural plants, and are well aware of the challenges with its control. In other words, most visitors would not look at those fields and consider them “natural.”

Service policy stipulates that offsite impacts cannot be the sole reason to eliminate an area from further consideration. However, they can be a factor. At Presquile NWR, there are significant offsite impacts in addition to the onsite impacts noted above, that support our determination that the refuge does not meet the naturalness criteria. As such, we believe the following additional reasons add cumulatively to those noted above to support our determination that the refuge does not meet the naturalness criteria. The James River is a major shipping channel leading from the Chesapeake Bay to Richmond, Virginia. Large barges and container shipping traffic occur immediately off the refuge approximately 2 to 3 times a week. Along the refuge boundary, the river width is less than 750 feet across, which creates a narrow shipping channel. Large ships or barges pass within 70 feet of the refuge and ships are either visible, or can be heard, from many locations on the refuge (see figure D-1). Other offsite impacts include the 450-acre Philip Morris USA industrial complex directly across the James River to the southwest of the refuge. An extensive layout of industrial buildings and several large smoke stacks are visible from the refuge uplands.

This stretch of the James River is also a popular route for large recreational motor boats, jet skies and other personal water craft, and for water skiing. Recreational boat traffic is very heavy during favorable weather conditions during the spring, summer, and fall seasons. The two interior creeks, when tides are favorable, are also very popular for anglers accessing by motor boats. Bass boats regularly access the interior of the refuge when tides allow. The tidal creeks are also popular with non-motorized boaters as well. The tidal creeks are state waters and not under the jurisdiction of the Service.

Finally, a 1,000-foot right of way from the center of the James River (500 feet on either side of the mainstem center, along the Turkey Island Cutoff and including the southern refuge shoreline), and a 50-acre area in the south east corner of the refuge (Area A), are part of perpetual right-of-way granted to the United States Army Corps of Engineers (USACOE) (see map D-2). The rights and easement allow the USACOE to excavate the cut away and remove those parts within the 1,000-foot area as needed to maintain the shipping channel, and also to deposit, with certain limitations, dredging material within Area A. These rights have not been exercised for decades, but they remain a right in perpetuity unless formally relinquished by the USACOE.

### **Evaluation of Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation**

To evaluate outstanding opportunities for solitude or primitive recreation, the area does not have to possess outstanding opportunities for both solitude and primitive and unconfined recreation, and does not need to have outstanding opportunities on every acre. Further, an area does not have to be open to public use and access to qualify under this criteria; Congress has designated a number of wilderness areas in the Refuge System that are closed to public access to protect resource values.

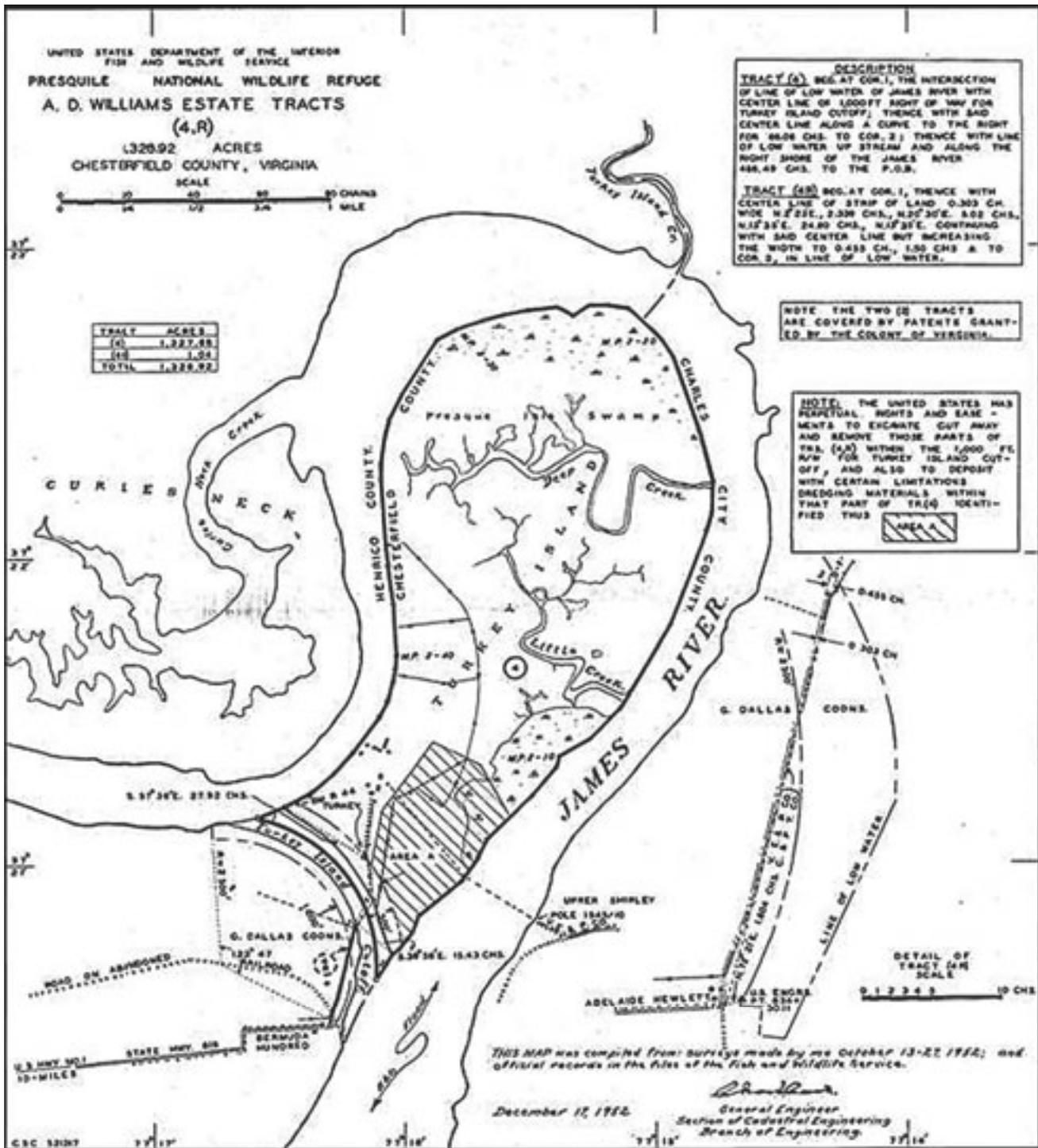
Opportunities for solitude refer to the ability of a visitor to be alone and secluded from other visitors in the area. Primitive and unconfined recreation means non-motorized, dispersed outdoor recreation activities that are compatible and do not require developed facilities or mechanical transport. These primitive recreation activities may provide opportunities to experience challenge and risk, self-reliance, and adventure.

These two opportunity “elements” are not well defined by the Wilderness Act but, in most cases, can be expected to occur together. However, an outstanding opportunity for solitude may be present in an area offering only limited primitive recreation potential. Conversely, an area may be so attractive for recreation use that experiencing solitude is not an option.

In our evaluation, the following factors and their cumulative effects were the primary considerations in evaluating the availability of outstanding opportunities for solitude or primitive recreation:

- Island size
- Availability of vegetative screening
- Proximity to an industrial complex on the mainland

Map D.2 Original Easements as of Presquile NWR Establishment in 1953



- Presence of motorized activities
- Presence of refuge structures and activities

**Conclusion:** We have determined that Presquile NWR meets the criteria for providing solitude and primitive and unconfined recreation. Primarily, solitude can be experienced by visitors who access the approximately 800 acres of forested tidal swamp and river backwaters on the refuge. Accessing the interior of the swamp, a person can feel alone and secluded due to the screening provided by the vegetation. Some of the factors noted above that detract from the naturalness of the refuge in the tidal swamp area, may affect a visitor’s experience to this area depending on their sensitivity to those facilities and the level of activity. Visitors who have the only refuge access permit during their visit may also experience solitude along some segments of the refuge’s upland trails that are out of sight of the river.

Visitors accessing the refuge by canoe and kayak can, at times, experience primitive and unconfined recreation in the interior of the tidal creeks. However, in this same area, there is a regular presence of bass boats and other motorboats, which also frequent the oxbow and mainstem of the James River surrounding the refuge. Similar to what is mentioned above for the discussion on solitude, the facilities and level of activity may affect some visitor’s experience of primitive and unconfined recreation.

**Evaluation of Supplemental Values**

Supplemental values are defined by the Wilderness Act as “...ecological, geological, or other features of scientific, educational, scenic, or historic value.” These values are not required for wilderness but their presence is considered during the evaluation.

**Conclusion:** Presquile NWR has several supplemental values related to the presence of archeological and historical resources, and wildlife and plants of conservation concern. All of these values are described in detail in chapter 2 in the draft CCP/EA. In brief, the refuge is part of the Lower James River Important Bird Area, an Audubon Society designation, due to the concentration of bald eagles, waterfowl, and other birds of high conservation concern. The federally listed sensitive joint-vetch occurs on the refuge, and the federally listed Atlantic sturgeon occurs just off refuge lands in the James River. The refuge has several cultural sites eligible for listing in the National Register of Historic Places. Recently, in conjunction with the completion of a comprehensive management plan for the Captain John Smith Chesapeake National Historic Trail, the refuge was recognized as an indigenous cultural landscape (NPS 2011).

**Summary of Inventory Findings for Presquile NWR**

<b>Criteria</b>	<b>Result</b>
Size	meets
Naturalness	does not meet
Solitude or Primitive and Unconfined Recreation	meets
Supplemental values	meets

Our inventory concludes that not all of the minimum criteria were met and therefore, we are not establishing a WSA. Proceeding on to the study and recommendation phases is not necessary.