

Opportunities for Partnerships with the U.S. Fish and Wildlife Service along the Captain John Smith Chesapeake National Historic Trail

1.1 Introduction

The U.S. Fish and Wildlife Service (FWS) manages fifteen refuges within the Chesapeake Bay region that offer opportunities for public access to the Captain John Smith Chesapeake National Historic Trail (NHT). The National Park Service (NPS) has collaborated with the FWS during development of the trail's 20-year comprehensive management plan to identify where these opportunities exist and to describe specific management actions that, if implemented, would enhance public enjoyment and understanding of the trail. At these locations the trail's stories would be told, focused on its three primary interpretive themes:

- the voyages of Captain Smith on the Chesapeake Bay and its tributaries from 1607 to 1609
- American Indian society and culture of the 17th century
- natural history of the Chesapeake Bay then and now

Thirteen refuges in the trail vicinity offer opportunities for public education and enjoyment of the trail include (figure L-1):

- | | |
|---|---------------------------------|
| - Blackwater NWR (including Garrett Island) | - Mason Neck NWR |
| - Glenn Martin NWR | - Featherstone NWR |
| - Eastern Neck NWR | - Rappahannock River Valley NWR |
| - Eastern Shore of Virginia NWR | - Plum Tree Island NWR |
| - Fisherman Island NWR | - Presquile NWR |
| - Patuxent Research Refuge | - James River NWR |
| - Occoquan NWR | |

The types of opportunities found vary significantly from refuge to refuge, determined by the refuge purpose, the extent to which a refuge is open to the public, staffing levels, and the availability of visitor facilities and interpretive programming. Some refuges are currently partially or completely closed, but opportunities are still identified because future management changes are anticipated that will likely soon open the refuge to public use. Two refuges – Susquehanna NWR and Nansemond NWR – do not offer trail opportunities because they are currently closed and are not expected to be opened for public use.

1.2 Planning Process Used to Identify Partnership Opportunities

NPS and FWS have considered potential opportunities for partnerships at each refuge, looking for:

- places where the trail's stories could be told
- places where there is potential for visitors to gain water access to the trail
- places where there is potential for visitors to view the voyage routes from the land

The FWS site managers assisted the NPS planning team by providing comprehensive conservation plans (CCP) for refuges for which a CCP is available. They also identified existing and planned visitor facilities, and provided preliminary ideas regarding access and interpretive opportunities related to the trail. The NPS planning team compiled the data, further considered trail-related opportunities, and then prepared a preliminary concept for each refuge illustrating where within each refuge different types of trail-related opportunities could be provided. The NPS planning team circulated the concepts to the refuge managers for comment. A set of final illustrative plans incorporate the comments that were received (see figures L.2 through L.13).

1.3 Overview of Findings

■ Appropriate and Compatible Uses at Refuges

In the future before any new use related to the Captain John Smith Chesapeake NHT is allowed on a refuge the FWS must first make a written determination that the use is both appropriate and compatible. Pursuant to the Refuge Improvement Act of 1997, any use of lands within the National Wildlife Refuge System must be both appropriate and compatible with the purposes of that particular refuge and the mission of the refuge system. Predetermined appropriate uses include:

- environmental education
- fishing
- hunting
- interpretation
- photography
- wildlife observation

While all six priority uses listed above are predetermined to be appropriate, they must still be determined to be compatible on a case-by-case basis, which is defined as "not materially interfering with" the purposes of the refuge or mission of the system. Any economic uses (i.e., commercial fishing, trapping, etc.) must pass a high threshold and must "contribute to" the purposes of the refuge and the mission of the system. Where the FWS

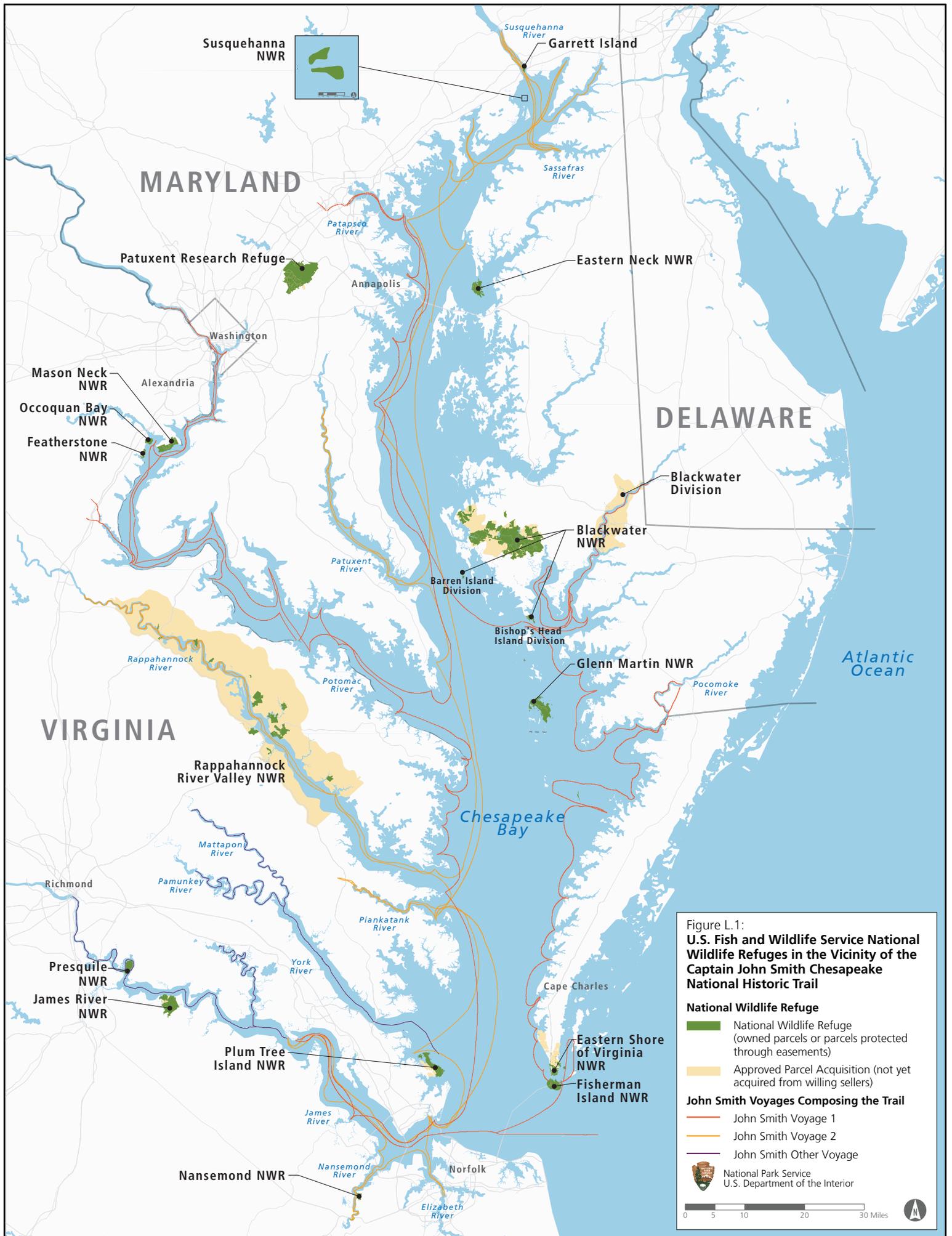


Figure L.1:
U.S. Fish and Wildlife Service National Wildlife Refuges in the Vicinity of the Captain John Smith Chesapeake National Historic Trail

National Wildlife Refuge

- National Wildlife Refuge (owned parcels or parcels protected through easements)
- Approved Parcel Acquisition (not yet acquired from willing sellers)

John Smith Voyages Composing the Trail

- John Smith Voyage 1
- John Smith Voyage 2
- John Smith Other Voyage

 National Park Service
 U.S. Department of the Interior

0 5 10 20 30 Miles 

can find the six priority uses to be compatible, then managers are encouraged to provide opportunities for them on refuges.

In designing interpretive programs and projects, managers would incorporate management actions that would define how these trail-related uses would occur at a refuge so that they would remain compatible. Such management actions could include one or more of the following:

- limiting visitor numbers to avoid significant disturbance to wildlife (e.g., by limiting the size of parking areas)
- avoiding investing resources to develop facilities that would have to be closed during several months of the year
- providing interpretive messages to make visitors aware of the potential for disturbance and pointing out that exceptional views of shorebirds and other wildlife can be obtained in a watercraft from a distance without causing undue disturbance (of concern in bald eagle concentration areas, shorebird nesting and roosting areas in marsh corridors and on sandy beaches)
- employing measures to keep boaters from accessing closed refuge areas and from accessing refuges after hours

■ **Types of Opportunities at Refuges for Trail Experiences**

Opportunities at refuges for public enjoyment and understanding of the trail generally fall into three categories:

- **Interpretive Opportunities.** These are places where trail interpretive media (related to one or more trail interpretive themes) could be located at existing and planned refuge facilities. These generally occur at or along auto/bike routes and wildlife drives, wildlife observation trails, boardwalks, water trails, canoe/kayak launches, boat docks, boat ramps, observation platforms, overlooks, interpretive waysides, visitor contact stations, and visitor centers.
- **Opportunities for Land Access.** These are places where existing or planned refuge facilities enable the public to view the voyage routes from the land, such as auto/bike routes and wildlife drives, wildlife observation trails, boardwalks, boat docks, boat ramps, observation platforms, overlooks, and interpretive waysides.
- **Opportunities for Water Access.** These are places where existing or planned refuge facilities enable the public to get onto the water and travel the voyage routes, such as canoe/kayak launches, boat docks, boat ramps, and water trails.

Most of the thirteen refuges offer a variety of opportunities in each of these categories. Although some such as Plum Tree Island and Fisherman Island have very limited opportunities.

1.3 Overview of Findings

■ **Blackwater National Wildlife Refuge**

Blackwater National Wildlife Refuge (figure L-2) encompasses approximately 25,685 acres of a mix of open water, brackish marsh, forested wetlands, and forested uplands. Primary public use activities include wildlife observation, wildlife photography, hunting, fishing, interpretation, and environmental education. Land now owned by FWS at the refuge is not located along the Captain John Smith Chesapeake NHT. Therefore, opportunities to tell the trail's stories would best focus on the interpretation of the natural history of the bay. This could occur at the visitor center, along the wildlife drive, along water trails, and along wildlife observation trails. Water access could be possible to the trail via a future water trail for small watercraft along the Blackwater River from the refuge to Fishing Bay.

Extensive opportunities to interpret the trail and to provide land and water access to the trail will become available in the future as the FWS acquires land within its approved parcel acquisition area along the Nanticoke River. FWS is very interested in working with the NPS and other partners to help identify opportunities that would meet both FWS's land protection purposes and make available the best areas to provide interpretation and potential access to the trail.

■ **Garrett Island (a unit of Blackwater NWR)**

Garrett Island (figure L-3) is a 198-acre undeveloped island in the Susquehanna River upstream of Havre de Grace, Maryland. It is likely that John Smith may have visited the island during one of his voyages up the Chesapeake. The island was recently conveyed to the U.S Fish and Wildlife Service. Access is via a designated beach area suitable for use by canoes and kayaks. Currently there are no visitor facilities or interpretive media on the island. The FWS has plans to develop an interpretive walking trail on the island. The island is a good site for developing interpretive stories about the voyages.

■ **Susquehanna National Wildlife Refuge**

Susquehanna NWR (figure L-4) is composed of two islands encompassing approximately 3.79 acres in the Chesapeake Bay south of Havre de Grace, Maryland. The islands are not open for public use. There are no opportunities for enhancing public enjoyment and understanding of the trail at the refuge.

■ **Glenn Martin National Wildlife Refuge**

Glenn Martin NWR (figure L-5) is composed of two units – Smith Island and Watts Island in the Chesapeake Bay. The refuge encompasses 4,423 acres and is composed of a large brackish marsh on the north end of Smith Island. While the islands are closed to the public, there are numerous sites along the perimeter of Martin Island where interpretive media could be installed to tell stories about the natural history of the bay. There is also a visitor contact station for the refuge at the Smith Island Visitor Center in Ewell where visitors could learn about the trail.

■ **Eastern Neck National Wildlife Refuge**

Eastern Neck NWR (figure L-6) is a 2,300-acre island at the southern terminus of Eastern Neck in Kent County, Maryland. Primary public use activities include wildlife observation, photography, environmental education, interpretation, fishing, and hunting. Visitation is high. Opportunities to achieve the three primary interpretive objectives of the trail are all possible at Eastern Neck. Although the refuge itself was not a known stop along the voyage routes, the refuge offers ample opportunities to describe the American Indian societies and cultures of the seventeenth century as well as opportunities to interpret the natural history of the bay. Land access to the trail could occur via existing wildlife observation trails and from the Tubby Cove Boardwalk. Water access to the trail could occur from the existing Bogles Wharf and Ingleside Recreation Area (both operated by Kent County).

■ **Eastern Shore of Virginia National Wildlife Refuge**

The Eastern Shore of Virginia NWR (figure L-7) encompasses 1,415 acres of upland and marsh habitat at the tip of the Delmarva Peninsula in Virginia. The refuge is open to public use daily, with a visitor center, walking trails, overlooks, photo blind, and boat ramp. Opportunities to tell the stories of the John Smith Chesapeake NHT could be accomplished through interpretive panels at the visitor center, the two overlooks, and at the Wise Point boat ramp, as well as along a planned 3-mile bike trail. Water access to the trail is available at the Wise Point boat ramp and at a canoe/kayak ramp owned by Northampton County. As additional lands within the refuge's approved parcel acquisition are acquired, more opportunities to tell trail stories and to access the trail would become available.

■ **Fisherman Island National Wildlife Refuge**

Fisherman Island (figure L-7) is a 1,850-acre island of upland, marsh, and coastal dune habitat located just offshore at the tip of the Delmarva Peninsula in Virginia. Because of the critical nature of its habitat for wildlife, the refuge is closed to public use. Boat landing or walking on the beach is not allowed. Guided tours are offered from the Wise Point Boat Ramp at the Eastern Shore of Virginia NWR every Saturday from October to mid-March. Opportunities exist to include the Captain John Smith Chesapeake NHT stories in the interpretive programming for the guided tours.

■ **Patuxent Research Refuge**

Patuxent Research Refuge (figure L-8) – encompassing approximately 12,840 acres – is one of the largest blocks of forest habitat in the Baltimore-Washington corridor. The refuge is unique within the refuge system in having a research support mission and is home to the National Wildlife Visitor Center. While the refuge is not located along the Captain John Smith Chesapeake NHT it does offer opportunities at its visitor center and along its interpretive trails and in other areas to tell stories about the natural history of the bay. The refuge has also expressed interest in replacing or significant modification of exhibits at the visitor center to enhance how the stories of the bay are told, to provide temporary displays about the trail in its visitor center lobby, and to make available trail brochures at the visitor center, the North Tract Contact Station, and other refuge entrances.

- **Occoquon National Wildlife Refuge**

Occoquon NWR (figure L-9) is composed of 644 acres of mixed grassland, wetland, tidal marsh, and forest. The refuge includes about two miles of shoreline along Occoquon Bay which John Smith explored on his voyage up and down the Potomac River. While the refuge is open year-round, public use is restricted to designated trails with seasonal closures of trail segments to protect nesting bald eagles. No water access exists and the shoreline is closed to the public. Opportunities to interpret the trail (all themes) and to have access to the trail from the land could be made available at existing wildlife observation trails and along the existing auto/bike route, as well as at a planned visitor center and boardwalk at Deephole Point. Addition of boat launch facilities is unlikely due to potential wildlife impacts.

- **Featherstone National Wildlife Refuge**

Featherstone NWR (figure L-9) is composed of 325 acres of mixed wetland and forest. The refuge includes about 2.2 miles of shoreline along the Potomac River which John Smith passed by on his voyage up and down the Potomac River. The refuge is currently closed to the public due to lack of access, although the FWS is actively working with Prince William County to secure access. In the future, once the refuge is open to the public, the Potomac Heritage Trail would be extended through the refuge, providing land access to the water and the Captain John Smith Chesapeake NHT. Two new observation platforms and fishing areas would be developed on the Potomac River. Opportunities would exist to interpret the trail (all themes) at these future facilities. Addition of boat launch facilities is unlikely due to potential wildlife impacts.

- **Mason Neck National Wildlife Refuge**

Mason Neck NWR (figure L-9) is composed of 1,883 acres of mature mixed deciduous forest and 364 acres of palustrine and riverine wetlands. The refuge includes over four miles of shoreline along the Potomac River and Occoquon Bay which John Smith passed by on his voyage up and down the Potomac River and as he explored Occoquon Bay. While the refuge is open year-round, public use is restricted to designated trails with seasonal closures of trail segments to protect nesting bald eagles. No water access exists and the shoreline is closed to the public. Opportunities to interpret the trail (all themes) and to have access to the trail from the land could be made available at existing wildlife observation trails, along the planned extension of the Wood Marsh Trail to the Potomac River at Sycamore Point, and at planned photo blinds. Addition of boat launch facilities is unlikely due to potential wildlife impacts.

- **Rappahannock River Valley National Wildlife Refuge**

Rappahannock River Valley NWR (figure L-10) encompasses approximately 8,190 acres, including approximately 1,660 acres in conservation easements. Refuge lands – exclusive of conservation easements – are open to the public for environmental education, fishing, hunting, interpretation, photography, and wildlife observation.

John Smith's journals describe many encounters with the Powhatan Tribe and locations of villages that are now on refuge property or that may become refuge property in the future. As a result there are many opportunities to tell the trail's stories at most refuge facilities, and water and trail access is available from a wide variety of existing and planned facilities at Laurel Grove, Wellford, Tayloe, Hutchinson, Wilna Lodge, Port Royal, and Wilmont Landing (figure L-10). As additional lands within the refuge's approved parcel acquisition area are acquired, more opportunities to tell trail stories and to access the trail would become available.

■ **Plum Tree Island National Wildlife Refuge**

Plum Tree Island NWR (figure L-11) is composed of approximately 3,500 acres of salt marsh with a few narrow bands of pine hummocks. Most of the refuge is currently closed to the public; only one tract, Cow Island, is open to visitors and is used seasonally for waterfowl hunting. Studies are underway to determine if hazards related to unexploded ordnance can be mitigated and the site safely opened to the public. Because the refuge lacks public access at this time, there is a need for promoting an interpretive message in the form of outreach and facilities on adjacent properties. FWS plans to create opportunities for visitors to overlook the refuge from off-site or along tidal tributaries, where various themes consistent with the refuge and refuge system mission and purposes could be told. Sites are planned at this time at Messick Point, and on Ridge Road, although the FWS does not yet own the land. If these sites and potentially others are secured, then the interpretive media could also tell the stories of the John Smith Chesapeake NHT. Other potential sites could be located along the Plum Tree Island Blueway, a water trail proposed to be developed by the FWS in partnership with the city of Poquoson. As additional lands within the refuge's approved parcel acquisition area are acquired, more opportunities to tell trail stories and to access the trail would become available.

■ **Presquile National Wildlife Refuge**

Presquile NWR (figure L-12) is a 1,320-acre island in the James River that attracts significant populations of eagles, waterfowl, and neotropical migrating birds to its tidal wetlands. The refuge is open to the public only by contacting the refuge. Limited opportunities for public environmental education, wildlife observation, deer hunting, and photography are offered. John Smith's journals describe many encounters with the Powhatan Tribe and locations of villages that are now on refuge property or that may become refuge property in the future. As a result there are many opportunities to tell the trail's stories at the existing boat dock and wildlife observation trail, and along the planned boardwalk and canoe/kayak launch.

■ **James River National Wildlife Refuge**

James River NWR (figure L-12) is composed of approximately 4,200 acres of forest and wetlands. The refuge is open to the public only by contacting the refuge. Interpretive opportunities are offered via a refuge-sponsored pontoon water tour, canoe/kayak trips, and self-service interpretive panels. The James River Association, Richmond Audubon Society, and Virginia Commonwealth University offer guided nature walks and other interpretive opportunities. John Smith's journals describe many encounters with the Powhatan Tribe and

locations of villages that are now on refuge property or that may become refuge property in the future. As a result there are many opportunities to tell the trail's stories at the existing observation trail, canoe/kayak launch, and planned eagle observation platform at Blair's Wharf. As additional lands within the refuge's approved parcel acquisition area are acquired, more opportunities to tell trail stories and to access the trail would become available.

- **Nansemond National Wildlife Refuge**

Nansemond NWR (figure L-13) encompasses 423 acres of tidal marsh and shoreline. It is a non-staffed satellite of Great Dismal Swamp NWR. The refuge is not open to the public and there are no plans to open it in the future. Smith's journals describe passage of the marsh that is now refuge property. However, because the island is closed there are no opportunities for enhancing public enjoyment and understanding of the trail at the refuge.

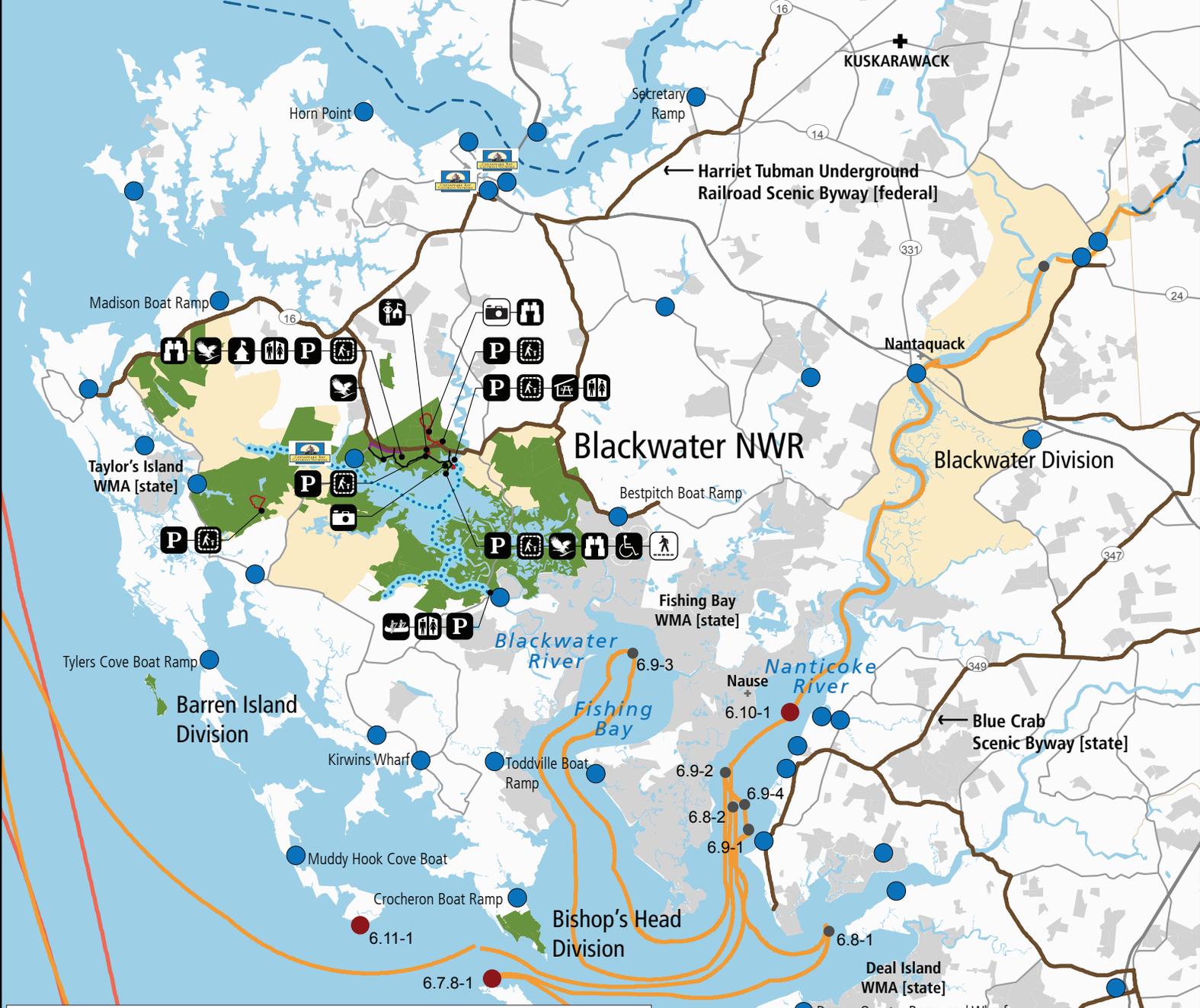


Figure L.2:
Illustrative Concept for Trail Opportunities in the Vicinity of the Blackwater National Wildlife Refuge

- John Smith Voyage 1
- John Smith Voyage 2
- 0.00/00 Significant Voyage Stop
- 0.00/00 Voyage Stop
- - - Water Trail
- Scenic Byway
- Boat Access Site (existing)
- Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements)
- Chesapeake Bay Gateways and Watertrails Network Partners
- Indian Villages**
- + Leaders' Town
- + Ordinary Village
- National Wildlife Refuge**
- Refuge Boundary (owned parcels or parcels protected through easements)
- Approved Parcel Aquisition (not yet acquired from willing sellers)

- Existing Refuge Facilities**
- Canoe/Kayak Launch
 - Comfort Station
 - Eagle Resting Site
 - Handicapped Area
 - Interpretive Trail
 - Parking
 - Photo Blind
 - Picnic Pavillion
 - Refuge Headquarters
 - Visitor Center
 - Water Trail
 - Wildlife Drive
 - Wildlife Observation Trail
 - Wildlife Viewing
- Proposed Refuge Facilities (planned by FWS)**
- Bicycle Trail
 - Boardwalk
 - Photo Blind

Blackwater NWR

CAPTAIN JOHN SMITH CHESAPEAKE NHT-
 Opportunities for Trail Interpretation and Access

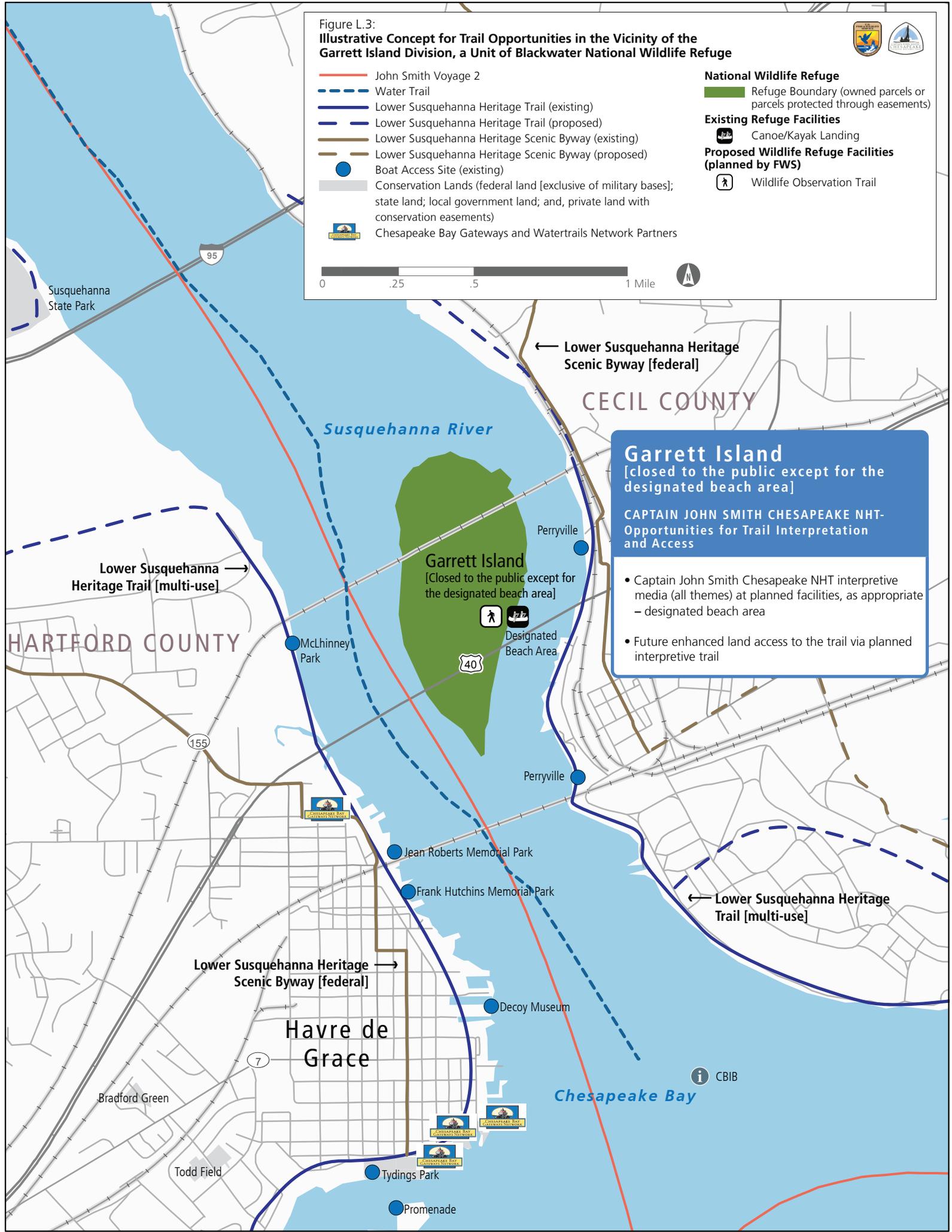
- Captain John Smith Chesapeake NHT interpretive media (natural history of the bay) at existing and planned facilities, as appropriate:
 - visitor center
 - wildlife drive
 - water trails
 - wildlife observation trails
- Water access from the refuge to the trail at Fishing Bay via the Blackwater River (17 miles) suitable for small craft only due to bridge and channel restriction
- Future land and water access to the trail (with interpretation - all themes) as tracts are acquired within the Nanticoke Division from willing sellers and where such land uses are determined to be compatible uses

Figure L.3:
**Illustrative Concept for Trail Opportunities in the Vicinity of the
 Garrett Island Division, a Unit of Blackwater National Wildlife Refuge**



- John Smith Voyage 2
- Water Trail
- Lower Susquehanna Heritage Trail (existing)
- Lower Susquehanna Heritage Trail (proposed)
- Lower Susquehanna Heritage Scenic Byway (existing)
- Lower Susquehanna Heritage Scenic Byway (proposed)
- Boat Access Site (existing)
- Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements)
- Chesapeake Bay Gateways and Watertrails Network Partners

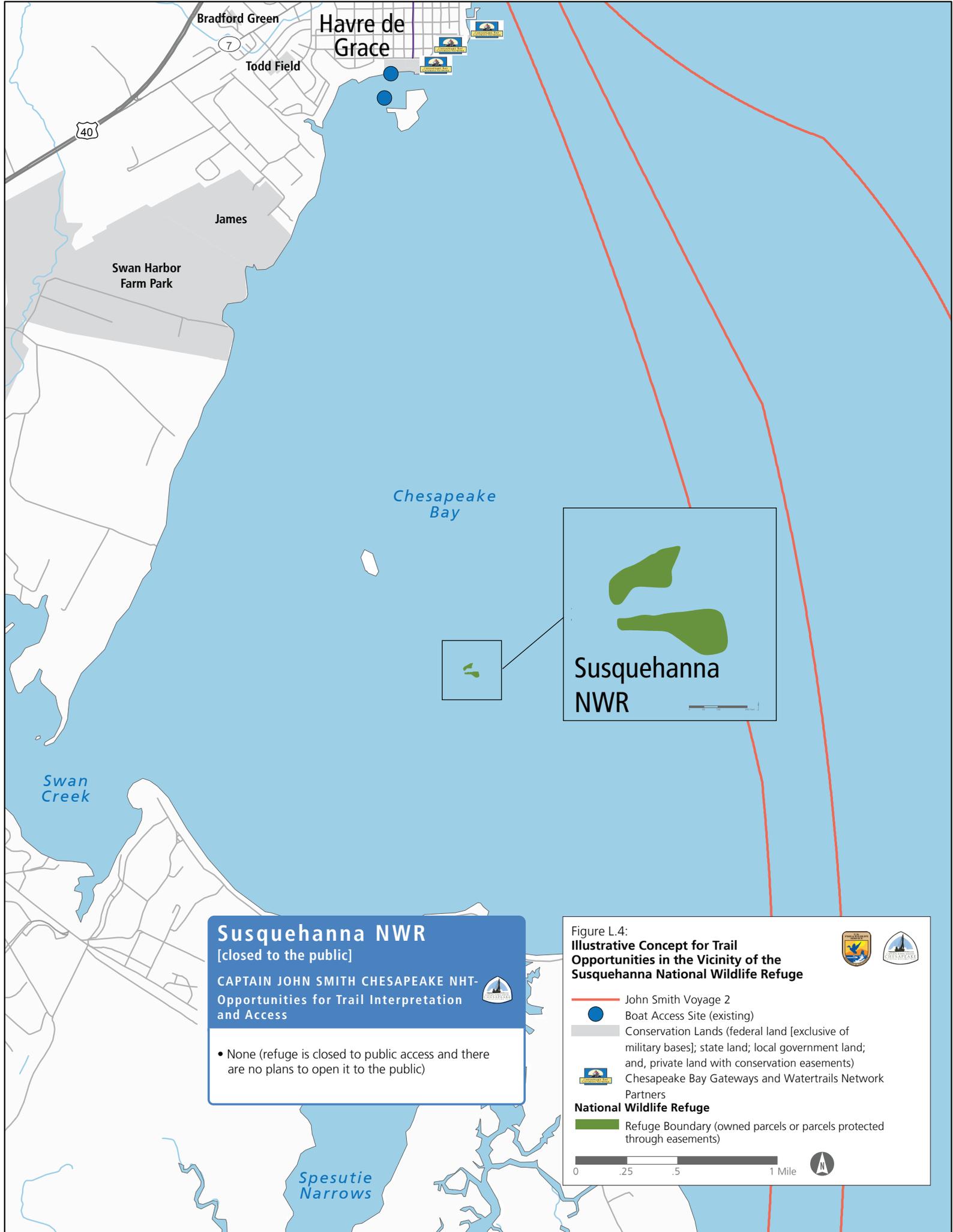
- National Wildlife Refuge**
- Refuge Boundary (owned parcels or parcels protected through easements)
- Existing Refuge Facilities**
- Canoe/Kayak Landing
- Proposed Wildlife Refuge Facilities (planned by FWS)**
- Wildlife Observation Trail



Garrett Island
 [closed to the public except for the designated beach area]

**CAPTAIN JOHN SMITH CHESAPEAKE NHT-
 Opportunities for Trail Interpretation
 and Access**

- Captain John Smith Chesapeake NHT interpretive media (all themes) at planned facilities, as appropriate – designated beach area
- Future enhanced land access to the trail via planned interpretive trail



Susquehanna NWR
 [closed to the public]

CAPTAIN JOHN SMITH CHESAPEAKE NHT-
 Opportunities for Trail Interpretation
 and Access

- None (refuge is closed to public access and there are no plans to open it to the public)

Figure L.4:
Illustrative Concept for Trail Opportunities in the Vicinity of the Susquehanna National Wildlife Refuge

- John Smith Voyage 2
- Boat Access Site (existing)
- Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements)
- Chesapeake Bay Gateways and Watertrails Network Partners

National Wildlife Refuge

- Refuge Boundary (owned parcels or parcels protected through easements)

0 .25 .5 1 Mile

Chesapeake Bay

Big Annessex River

Glenn Martin NWR

[Closed to Public Use]

Martin Island

Smith Island Visitor Center  Ewell 

Smith Island

Rhodes Point Wharf 

Tylerton Ramp and Wharf 

Tyler Creek

Janes Island State Park 

Blue Crab Scenic Byway [state] 

Crisfield 





Cedar Island WMA [state] 

MARYLAND VIRGINIA

6.6-1 

Glenn Martin NWR

[closed to public use]

CAPTAIN JOHN SMITH CHESAPEAKE NHT
Opportunities for Trail Interpretation and Access

- Captain John Smith Chesapeake NHT interpretive media (all themes), as appropriate:
 - at the Smith Island Visitor Center at Ewell (natural history of the bay theme)
 - at a few sites along the perimeter of Martin Island

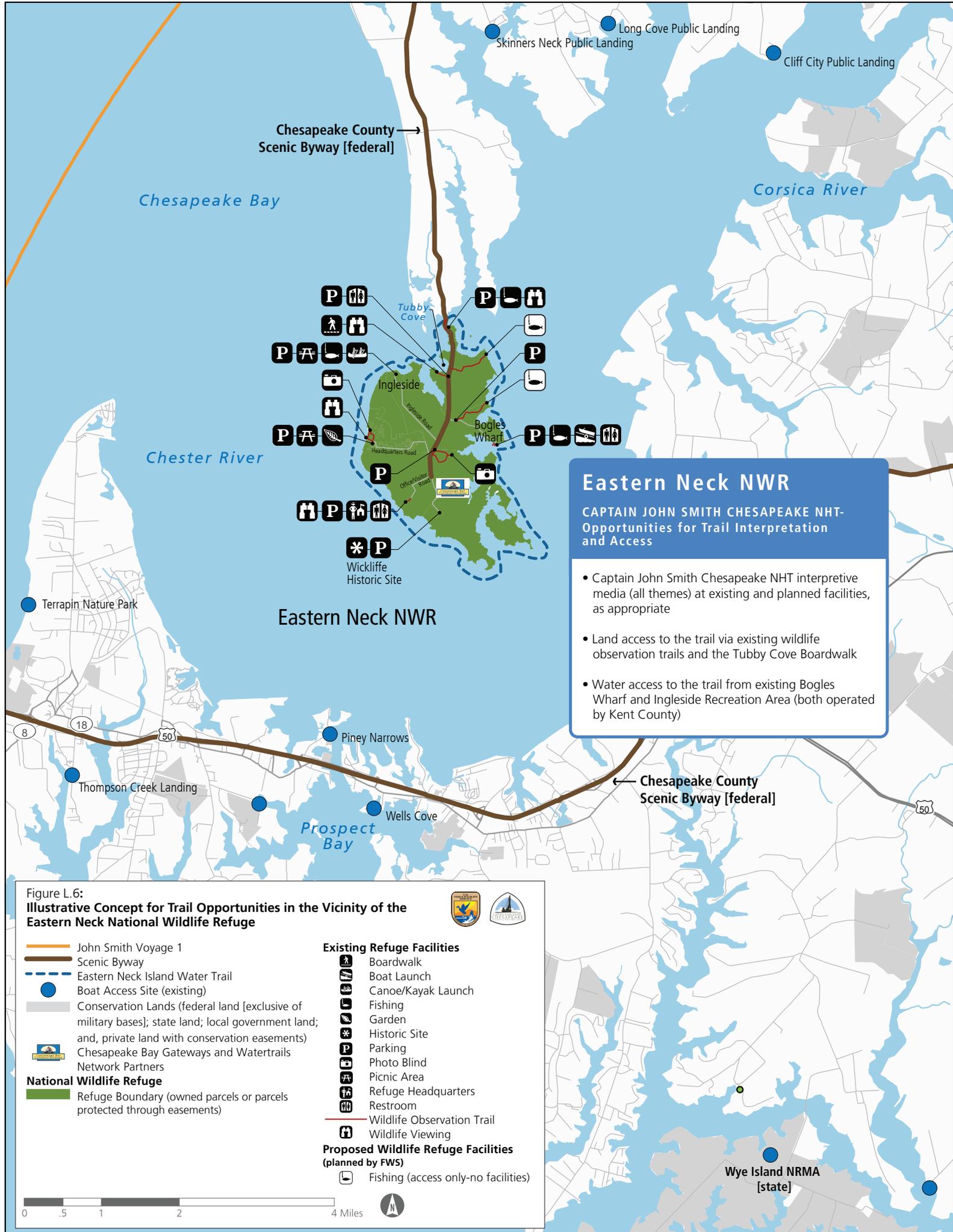
Tidal Lands [state]

Figure L.5:
Illustrative Concept for Trail Opportunities in the Vicinity of the Glenn Martin National Wildlife Refuge



-  John Smith Voyage 1
-  0.00000 Significant Voyage Stop
-  Scenic Byway
-  Virginia Birding and Wildlife Trail
-  Boat Access Site (existing)
-  Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements)
-  Chesapeake Bay Gateways and Watertrails Network Partners
- National Wildlife Refuge**
-  Refuge Boundary (owned parcels or parcels protected through easements)
-  Smith Visitor Center





Eastern Neck NWR

CAPTAIN JOHN SMITH CHESAPEAKE NHT-
Opportunities for Trail Interpretation
and Access

- Captain John Smith Chesapeake NHT interpretive media (all themes) at existing and planned facilities, as appropriate
- Land access to the trail via existing wildlife observation trails and the Tubby Cove Boardwalk
- Water access to the trail from existing Bogles Wharf and Ingleside Recreation Area (both operated by Kent County)

**Figure L.6:
Illustrative Concept for Trail Opportunities in the Vicinity of the
Eastern Neck National Wildlife Refuge**

Legend

- John Smith Voyage 1
- Scenic Byway
- Eastern Neck Island Water Trail
- Boat Access Site (existing)
- Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements)
- Chesapeake Bay Gateways and Watertrails Network Partners
- National Wildlife Refuge**
- Refuge Boundary (owned parcels or parcels protected through easements)

Existing Refuge Facilities

- Boardwalk
- Boat Launch
- Canoe/Kayak Launch
- Fishing
- Garden
- Historic Site
- Parking
- Photo Blind
- Picnic Area
- Refuge Headquarters
- Restroom
- Wildlife Observation Trail
- Wildlife Viewing

Proposed Wildlife Refuge Facilities (planned by FWS)

- Fishing (access only-no facilities)

0 .5 1 2 4 Miles

Figure L.6:
**Illustrative Concept for Trail Opportunities in the Vicinity of the
Eastern Neck National Wildlife Refuge**



Eastern Shore of Virginia NWR

CAPTAIN JOHN SMITH CHESAPEAKE NHT- Opportunities for Trail Interpretation and Access

- Captain John Smith Chesapeake NHT interpretive media (all themes) at existing and planned facilities, as appropriate:
 - visitor center (existing)
 - Wise Point Boat Ramp (existing)
 - canoe/kayak launch (in collaboration with Northampton County) (existing)
 - wildlife observation trails (existing)
 - overlooks (2) (existing)
 - bike trail (existing)
- Land access to the trail at all existing refuge tracts owned by the Fish and Wildlife Service (auto, biking, and/or hiking)
- Water access to the trail at Wise Point Boat Ramp
- Future land and water access to the trail (with interpretation – all themes) as tracts are acquired from willing sellers and where such uses are determined to be compatible uses

Fisherman Island NWR

[closed to the public]

CAPTAIN JOHN SMITH CHESAPEAKE NHT- Opportunities for Trail Interpretation and Access

- Captain John Smith Chesapeake NHT interpretive media provided and stories told during seasonal guided tours (all themes)

Figure L.7:
Illustrative Concept for Trail Opportunities in the Vicinity of the Eastern Shore of Virginia National Wildlife Refuge and Fisherman Island National Wildlife Refuge

- John Smith Voyage 1
- 0.00/00 Significant Voyage Stop
- 0.00/00 Voyage Landing Stop
- Virginia's Eastern Shore Seaside Water Trail
- Virginia Birding and Wildlife Trail
- Boat Access Site (existing)
- Conservation Lands (federal land; state land; local government land; and, private land with conservation easements)
- Chesapeake Bay Gateways and Watertrails Network Partners
- Indian Villages**
 - Leaders' Town
- National Wildlife Refuge**
 - Refuge Boundary (owned parcels or parcels protected through easements)
 - Approved Parcel Aquisition (not yet acquired from willing sellers)
- Existing Refuge Facilities**
 - Administrative Building
 - Bike Trail
 - Boat Ramp and Dock
 - Canoe/Kayak Launch (owned by Northampton County)
 - Overlook
 - Visitor Center
 - Wildlife Observation Trail
 - Parking
 - Photo Blind

0 .5 1 2 Miles

Figure L.7:
Illustrative Concept for Trail Opportunities in the Vicinity of the Eastern Shore of Virginia National Wildlife Refuge and Fisherman Island National Wildlife Refuge

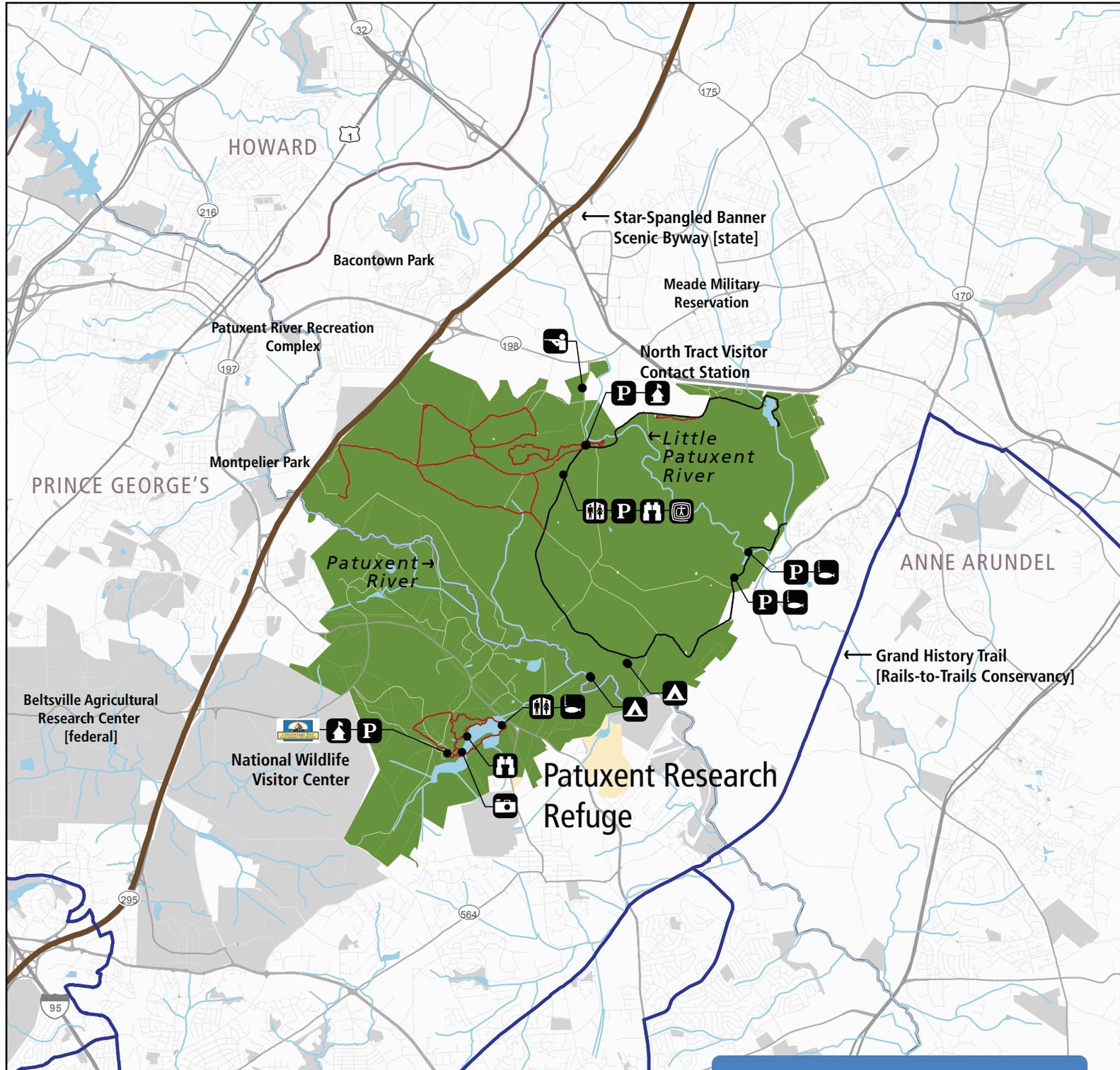


Figure L.8:
Illustrative Concept for Trail Opportunities in the Vicinity of the Patuxent Research Refuge

- Grand History Trail
- Scenic Byway
- Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements)
- Chesapeake Bay Gateways and Watertrails Network Partners
- National Wildlife Refuge**
- Refuge Boundary (owned parcels or parcels protected through easements)
- Approved Parcel Acquisition (not yet acquired from willing sellers)

- Existing Refuge Facilities**
- Environmental Education Classroom
 - Fishing
 - Hunting Control Station
 - Parking
 - Photo Blind
 - Restroom
 - Road
 - Scout Campsite
 - Wildlife Observation Trail
 - Visitor Center/Station
 - Wildlife Viewing Area

Patuxent Research Refuge

CAPTAIN JOHN SMITH CHESAPEAKE NHT- Opportunities for Trail Interpretation and Access

- Captain John Smith Chesapeake NHT interpretive media (to enhance messages related to water quality and wildlife of the Bay), possibly including:
 - some replacement or significant modification of exhibits at National Wildlife Visitor Center
 - temporary displays in the National Wildlife Visitor Center lobby
 - interpretive trail signs, particularly along trails or other areas near the Little Patuxent River
 - brochures made available at the National Wildlife Visitor Center and the North Tract Contact Station and other entrances

Elizabeth Hartwell Mason Neck NWR

[shoreline closed to the public]

CAPTAIN JOHN SMITH CHESAPEAKE NHT-
Opportunities for Trail Interpretation and Access

- Captain John Smith Chesapeake NHT interpretive media (all themes) at existing and planned facilities, as appropriate:
 - wildlife observation trails (existing)
 - Wood Marsh Trail extension to Potomac River (planned)
 - photo blind (planned)
- Land access to the trail via:
 - Wood Marsh Trail and Great Marsh Trail (existing)
 - Wood Marsh Trail extension to Potomac River (planned)

Occoquan Bay NWR

[shoreline closed to the public]

CAPTAIN JOHN SMITH CHESAPEAKE NHT-
Opportunities for Trail Interpretation and Access

- Captain John Smith Chesapeake NHT interpretive media (all themes) at existing and planned facilities, as appropriate:
 - auto/bike route (existing)
 - wildlife observation trails (existing)
 - observation platform (existing)
 - visitor center (planned)
 - boardwalk (planned)
- Land access to the trail via:
 - auto/bike route (existing)
 - wildlife observation trails (existing)
 - Deephole Point boardwalk (planned)

Occoquan Bay NWR

[shoreline closed to the public]

Featherstone NWR

[Currently not accessible to the public; FWS plans to open to the public when legal access is secured; shoreline will remain closed]

Featherstone NWR

[currently not accessible to the public; FWS plans to open to the public when legal access is secured; shoreline will remain closed]

CAPTAIN JOHN SMITH CHESAPEAKE NHT-
Opportunities for Trail Interpretation and Access

- Once the refuge is open to the public:
 - Captain John Smith Chesapeake NHT interpretive media (all themes) at planned facilities, as appropriate
 - land access to the trail via the Potomac Heritage Trail (planned)
 - land access to the trail via new wildlife observation trail and boardwalk (planned)

Figure L.9:
Illustrative Concept for Trail Opportunities in the Vicinity of the Featherstone, Mason Neck, and Occoquan Bay National Wildlife Refuges

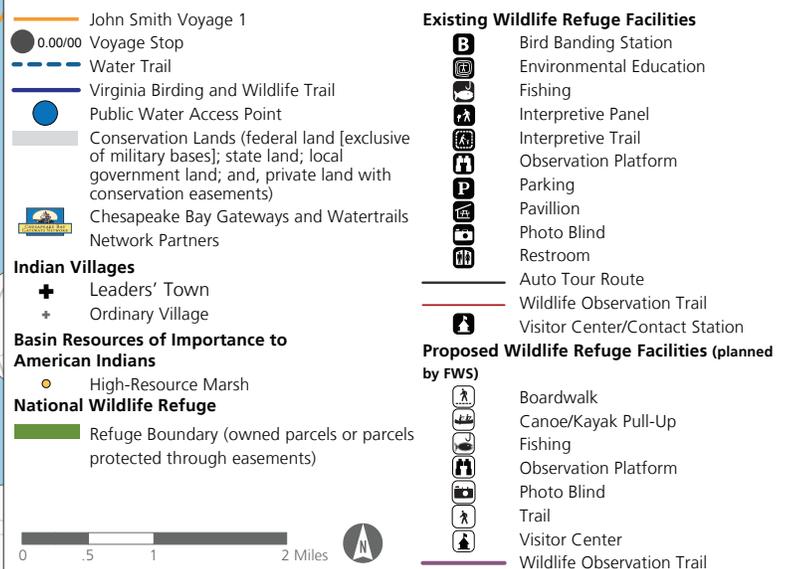


Figure L.10:
**Illustrative Concept for Trail Opportunities
 in the Vicinity of the Rappahannock River
 Valley National Wildlife Refuge**



- John Smith Voyage 1
- John Smith Voyage 2
- Significant Voyage Stop
- Voyage Stop
- Water Trail
- Virginia Birding and Wildlife Trail
- Boat Access Site (existing)
- Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements)
- Chesapeake Bay Gateways and Watertrails Network Partners

Indian Villages

- + Leaders' Town
- + Ordinary Village

Basin Resources of Importance to American Indians

- High-Resource Marsh

National Wildlife Refuge

- Refuge Boundary (owned parcels or parcels protected through easements)
- Refuge Easement
- Approved Parcel Acquisition (not yet acquired from willing sellers)

Existing Refuge Facilities

- Canoe/Kayak Launch
- Fishing
- Headquarters
- Interpretive Trail
- Parking
- Pavillion
- Restroom
- Water Trail
- Wildlife Observation Trail

Proposed Refuge Facilities (planned by FWS)

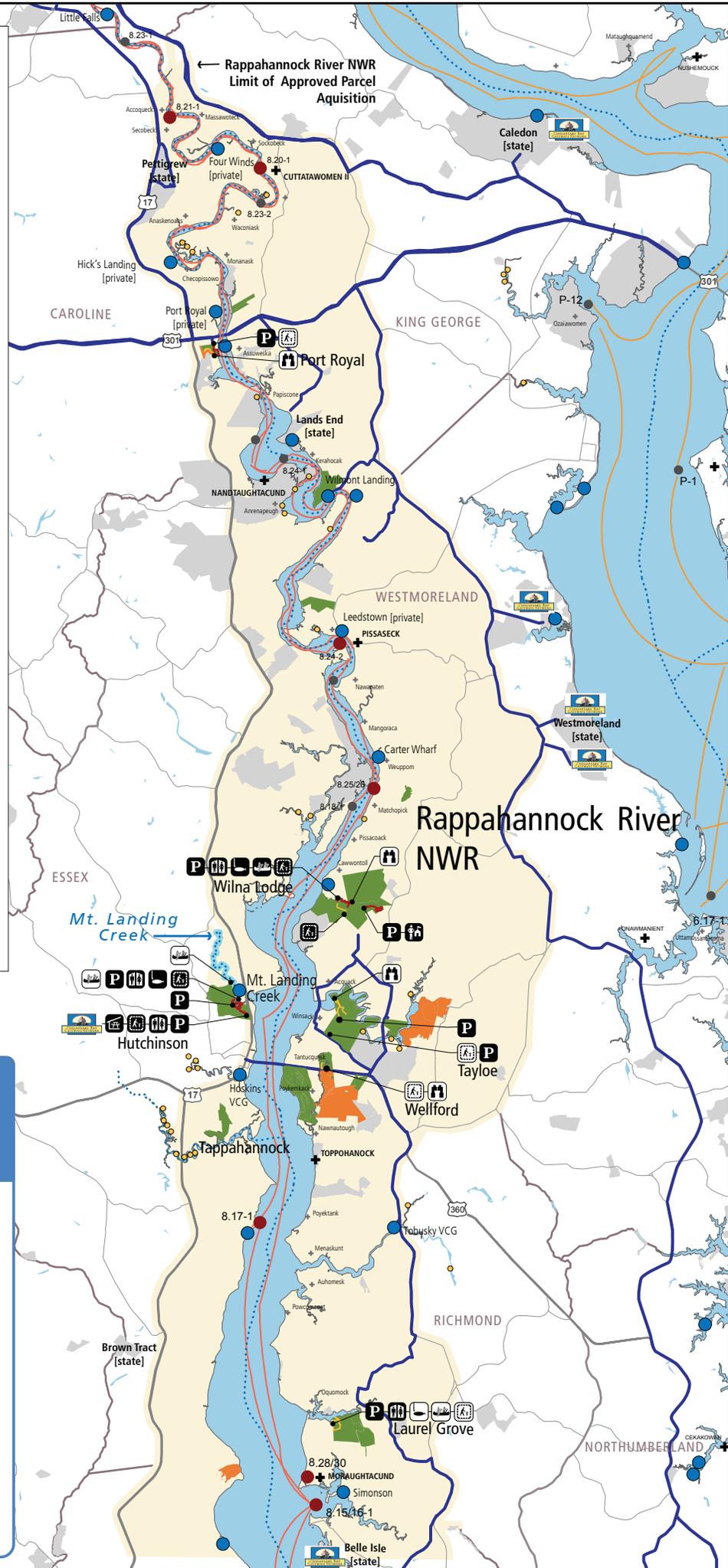
- Fishing Area
- Canoe/Kayak Launch
- Interpretive Trail
- Photo Blind
- Wildlife Observation Trail



Rappahannock River Valley NWR

CAPTAIN JOHN SMITH CHESAPEAKE NHT- Opportunities for Trail Interpretation and Access

- Captain John Smith Chesapeake NHT interpretive media (all themes) at existing and planned facilities, as appropriate:
 - Mt. Landing Creek Water Trail (existing)
 - Wilna Creek Wildlife Observation Trail (planned)
 - Port Royal Wildlife Observation Trail (planned)
 - Laurel Grove Wildlife Observation Trail (planned)
 - Wellford Wildlife Observation Trail (planned)
- Land access to the trail at all existing refuge tracts owned by the Fish and Wildlife Service (auto, biking, and/or hiking)
- Water access to the trail at:
 - Wilna
 - Mt. Landing Creek
 - Laurel Grove (planned)
- Future land and water access to the trail (with interpretation – all themes) as tracts are acquired from willing sellers and where such uses are determined to be compatible uses



Plum Tree Island NWR

[closed to the public, except for seasonal hunting on Cow Island]

CAPTAIN JOHN SMITH CHESAPEAKE NHT-
Opportunities for Trail Interpretation and Access

- Off-refuge Captain John Smith Chesapeake NHT interpretive media (John Smith Voyages and Chesapeake Bay natural history themes):
 - interpretive panels at Messick Point and/or on Ridge Road
 - interpretive panels along proposed Plum Tree Island Blueway (in partnership with FWS and the City of Poquoson)
- Future land and water access to the trail (with interpretation – all themes) as tracts are acquired from willing sellers and where such uses are determined to be compatible uses
- Additional opportunities may arise if and when public access is possible (pending completion of ACOE munitions investigation study in 2011)



Figure L.11:
Illustrative Concept for Trail Opportunities in the Vicinity of the Plum Tree Island National Wildlife Refuge

- | | |
|---|---|
| <ul style="list-style-type: none"> — John Smith Voyage 1 — John Smith Other Voyage ● 0.00/00 Voyage Stop Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements) - - - Proposed Blueway ● Boat Access Site (existing) | <p>National Wildlife Refuge</p> <ul style="list-style-type: none"> Refuge Boundary (owned parcels or parcels protected through easements) Approved Parcel Acquisition (not yet acquired from willing sellers) <p>Existing Refuge Facilities</p> <ul style="list-style-type: none"> Cow Island Hunting Area <p>Opportunities for New Refuge Facilities (planned by FWS)</p> <ul style="list-style-type: none"> Interpretive Wayside |
|---|---|



HAMPTON

Grandview Nature Preserve

POQUOSON

Proposed Plum Tree Island Blueway
[by the City of Poquoson]

Plum Tree Island NWR
[closed to the public, except for seasonal hunting on Cow Island]

Cow Island

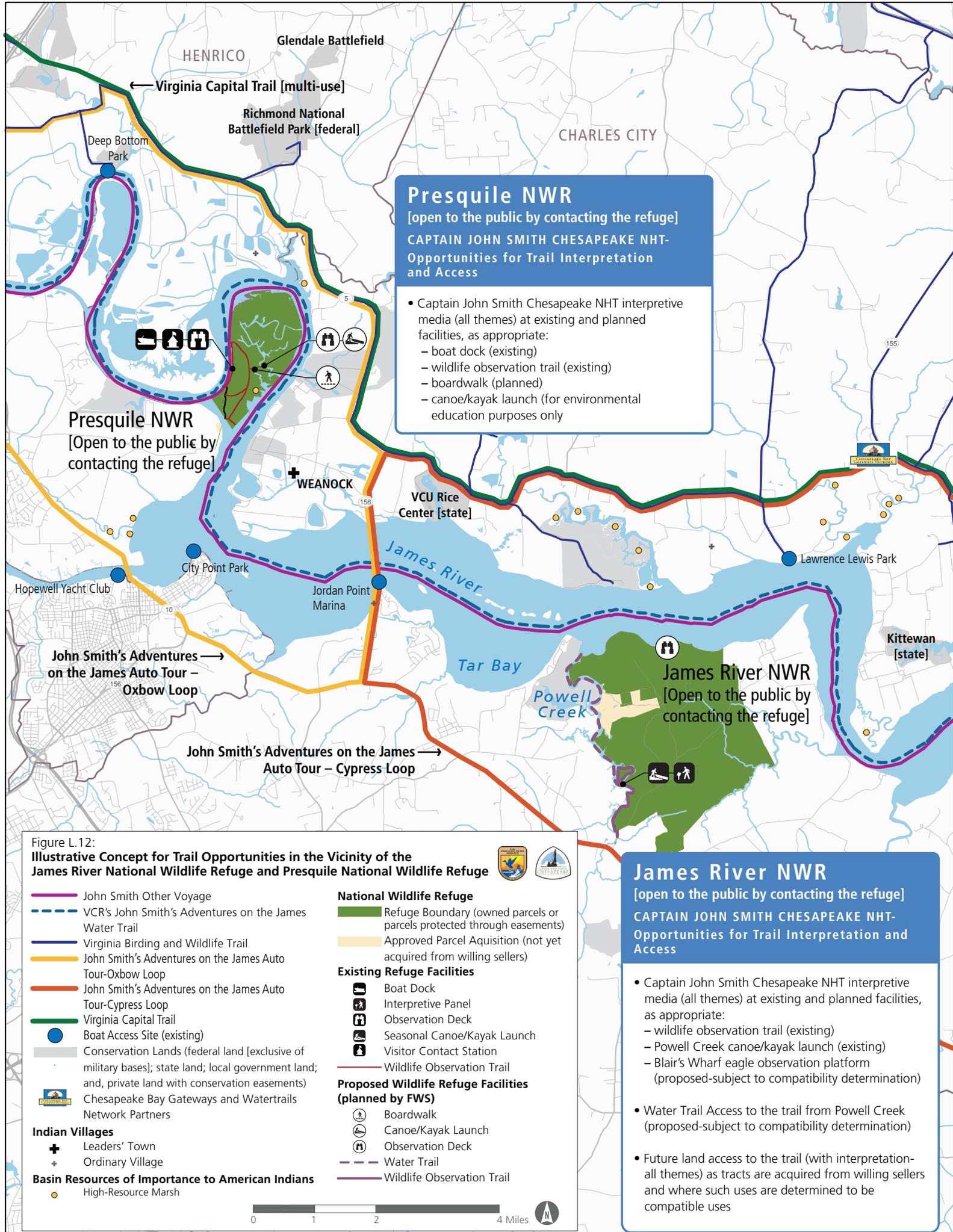
Whitehouse Cove

Cedar Road Landing

Langley Air Force Base

Amory's Wharf Landing

Messick Point



Presquile NWR
 [open to the public by contacting the refuge]
CAPTAIN JOHN SMITH CHESAPEAKE NHT
Opportunities for Trail Interpretation and Access

- Captain John Smith Chesapeake NHT interpretive media (all themes) at existing and planned facilities, as appropriate:
 - boat dock (existing)
 - wildlife observation trail (existing)
 - boardwalk (planned)
 - canoe/kayak launch (for environmental education purposes only)

James River NWR
 [open to the public by contacting the refuge]
CAPTAIN JOHN SMITH CHESAPEAKE NHT
Opportunities for Trail Interpretation and Access

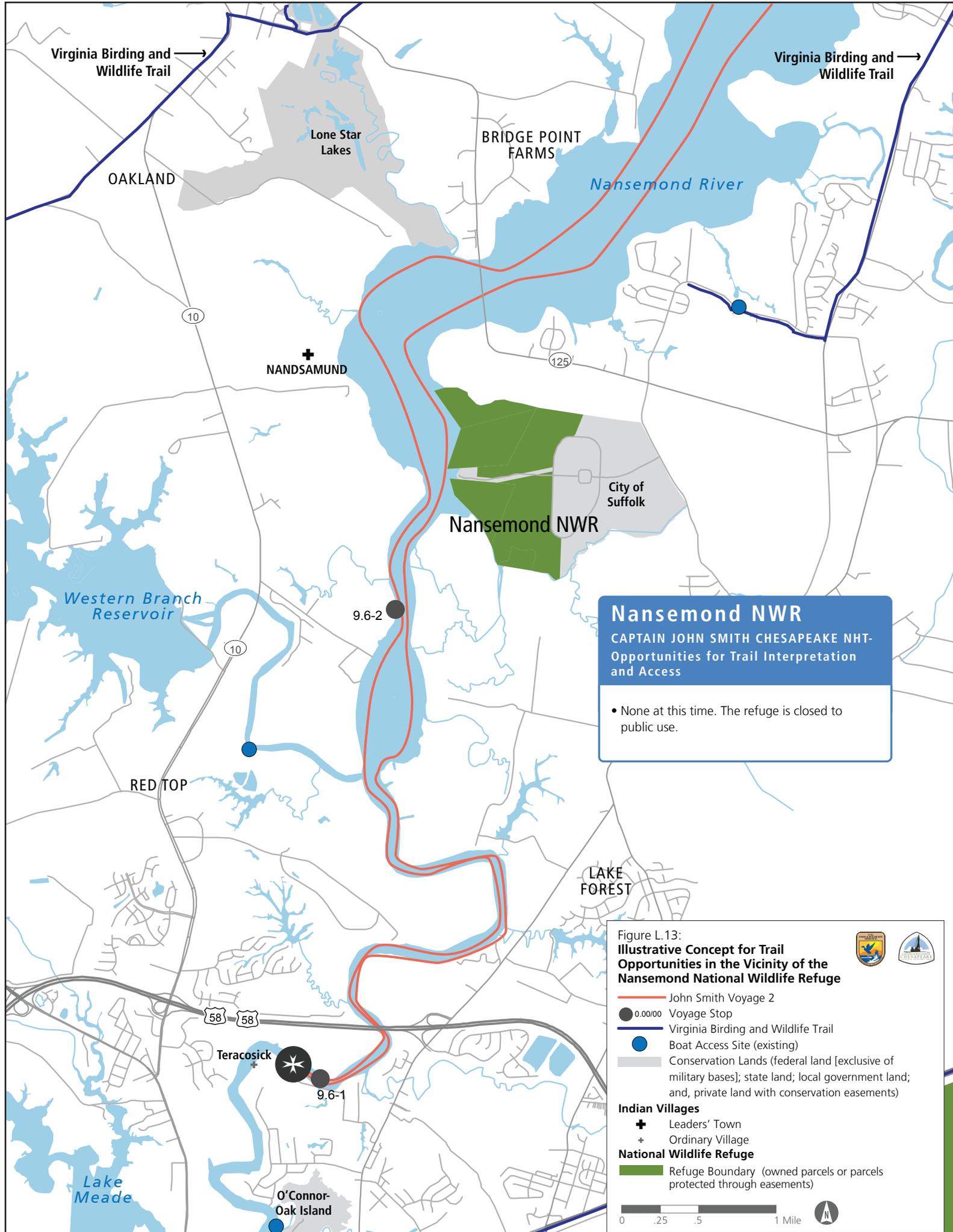
- Captain John Smith Chesapeake NHT interpretive media (all themes) at existing and planned facilities, as appropriate:
 - wildlife observation trail (existing)
 - Powell Creek canoe/kayak launch (existing)
 - Blair's Wharf eagle observation platform (proposed-subject to compatibility determination)
- Water Trail Access to the trail from Powell Creek (proposed-subject to compatibility determination)
- Future land access to the trail (with interpretation-all themes) as tracts are acquired from willing sellers and where such uses are determined to be compatible uses

Figure L.12: Illustrative Concept for Trail Opportunities in the Vicinity of the James River National Wildlife Refuge and Presquile National Wildlife Refuge

- John Smith Other Voyage
- - - VCR's John Smith's Adventures on the James Water Trail
- Virginia Birding and Wildlife Trail
- John Smith's Adventures on the James Auto Tour-Oxbow Loop
- John Smith's Adventures on the James Auto Tour-Cypress Loop
- Virginia Capital Trail
- Boat Access Site (existing)
- Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements)
- Chesapeake Bay Gateways and Watertrails Network Partners
- Indian Villages**
 - ⊕ Leaders' Town
 - ⊕ Ordinary Village
- Basin Resources of Importance to American Indians**
 - High-Resource Marsh

- National Wildlife Refuge**
 - Refuge Boundary (owned parcels or parcels protected through easements)
 - Approved Parcel Acquisition (not yet acquired from willing sellers)
- Existing Refuge Facilities**
 - Boat Dock
 - Interpretive Panel
 - Observation Deck
 - Seasonal Canoe/Kayak Launch
 - Visitor Contact Station
 - Wildlife Observation Trail
- Proposed Wildlife Refuge Facilities (planned by FWS)**
 - Boardwalk
 - Canoe/Kayak Launch
 - Observation Deck
 - - - Water Trail
 - Wildlife Observation Trail





Nansemond NWR
 CAPTAIN JOHN SMITH CHESAPEAKE NHT-
 Opportunities for Trail Interpretation
 and Access

- None at this time. The refuge is closed to public use.

Figure L.13:
Illustrative Concept for Trail Opportunities in the Vicinity of the Nansemond National Wildlife Refuge

- John Smith Voyage 2
- Voyage Stop
- Virginia Birding and Wildlife Trail
- Boat Access Site (existing)
- Conservation Lands (federal land [exclusive of military bases]; state land; local government land; and, private land with conservation easements)

Indian Villages

- Leaders' Town
- Ordinary Village

National Wildlife Refuge

- Refuge Boundary (owned parcels or parcels protected through easements)

0 .25 .5 1 Mile

