



United States Department of the Interior

NATIONAL PARK SERVICE
Northeast Region
United States Custom House
200 Chestnut Street
Philadelphia, PA 19106

IN REPLY REFER TO:

US Army Corps of
Engineers
Norfolk District Regulatory
Office
Received by: RLS
Date: June 10, 2015

June 9, 2015

Ms. Lynette R. Rhodes
Mr. Randy Steffey
Norfolk District, US Army Corps of Engineers
ATTN: CENAO-WR-R
803 Front Street
Norfolk, VA 23510-1096

Re: Dominion Surry-Skiffes Creek-Wheaton Transmission Line Consultation /NAO-2012-00080; 13-V0408

Dear Ms. Rhodes and Mr. Steffey:

This letter and the attached addendum are in response to the document titled "Dominion Virginia Power Surry-Skiffes Creek-Wheaton Proposed 500/230kV Line, NAO-2012-00080 / 13-V0408; Washington-Rochambeau Revolutionary Route National Historic Trail, National Register of Historic Places Eligibility of the Captain John Smith National Historic Trail, and Other Potentially Eligible Cultural Landscapes Within the Area of Potential Effect" US Army Corps of Engineers, Norfolk District Regulatory Branch, May 7, 2015.

The USACE document: (1) identifies a cultural landscape in the vicinity of Jamestown Island and Hog Island as eligible for the National Register of Historic Places (NRHP); (2) comments upon the "Historic Triangle;" (3) makes recommendations regarding the eligibility of resources related to the Captain John Smith Chesapeake National Historic Trail (CAJO); and (4) makes recommendations regarding eligibility of Washington Rochambeau Revolutionary Route National Historic Trail (WARO) resources.

In the attached addendum we explicitly address issues pertaining to eligibility of historic resources, principally focusing on items 1 and 3 above. In particular, we cannot agree or concur with the treatment or conclusions relative to the Captain John Smith Chesapeake National Historic Trail and trail resources. We believe the portion of the trail extending through the project's area of potential effect is eligible for the National Register and includes land-based sites and landscape features that contribute to that eligibility. In a separate letter to the Advisory Council on Historic Preservation, we are requesting the Council to require the USACE to obtain a determination of eligibility from the Keeper of the NRHP for the trail within the project's area of potential effect. We believe the addendum material will be of assistance in this process.

We note that subsequent to the May 7 document the USACE issued a May 21 email soliciting consulting party comments by June 20 "to assist in evaluation of the effects of the undertaking on historic properties and evaluation of alternatives or modifications which could avoid, minimize or mitigate adverse effects of the undertaking." While we anticipate providing additional comments relative to that

request, it is essential for us to raise significant issues concerning the identification of historic properties and National Register eligibility first.

The National Park Service is committed to working with the USACE on this matter; we are happy to meet with you at your convenience. In addition, as we believe these issues are of such consequence--and consulting parties have not yet been provided an opportunity to discuss them and the subject report with the USACE and the State Historic Preservation Office--they should be discussed in a consulting parties meeting.

Sincerely,

A handwritten signature in black ink, appearing to read "Frank R. Hays". The signature is fluid and cursive, with a large initial "F" and "H".

Frank Hays
Acting Associate Regional Director, Stewardship

Attachment: Addendum

cc:

Col. Paul Olsen, Commander, Norfolk District, US Army Corps of Engineers

Reid Nelson, Director, Office of Federal Agency Programs, Advisory Council on Historic Preservation

Charlene Dwin Vaughn, Assistant Director, Advisory Council on Historic Preservation

John Eddins, Program Analyst, Advisory Council on Historic Preservation

Julie Langan, SHPO, Virginia Department of Historic Resources

Roger Kirchen, Director of Division of Review and Compliance, Virginia Department of Historic Resources

Jeff Durbin, Sect. 106 Compliance Officer, National Park Service

Paul Loether, Chief, National Register of Historic Places and National Historic Landmarks, National Park Service

Chuck Hunt, Superintendent, Captain John Smith Chesapeake NHT, National Park Service

ADDENDUM

Specific Comments Regarding the Document:

Dominion Virginia Power Surry-Skiffes Creek-Whealton Proposed 500/230kV Line, NAO-2012-00080 / 13-V0408; Washington-Rochambeau Revolutionary Route National Historic Trail, National Register of Historic Places Eligibility of the Captain John Smith National Historic Trail, and Other Potentially Eligible Cultural Landscapes Within the Area of Potential Effect, US Army Corps of Engineers, Norfolk District Regulatory Branch, May 7, 2015.

This document sets out specific comments on the report above. These comments focus on sections of the report addressing a recommended cultural landscape and the eligibility of the Captain John Smith Chesapeake National Historic Trail.

Context:

In a February 13, 2015 letter, the Deputy Keeper of the National Register of Historic Places (NRHP) stated:

"The National Park Service identified seven types of CAJO-related historic resources At least some of these resources, as well as specific portions of the trail itself, may prove eligible for listing in the National Register, either individually or as integral, character-defining features of a larger site or district."

Further, in an April 17, 2015 letter, the Advisory Council on Historic Preservation stated:

"The Keeper recognizes that there may be districts, sites, buildings, structures or objects associated with the trail or parts of it that are eligible for listing, and the trail, as a natural landscape feature, might be included within the boundary of eligible or listed districts ... and considered as contributing to the significance and integrity of such a property."

In this light, the National Park Service (NPS) provides the following analysis.

The Recommended Jamestown Island-Hog Island Cultural Landscape:

We commend the USACE for recognizing a NRHP-eligible cultural landscape in the vicinity of Jamestown Island and Hog Island. We also note and appreciate that the USACE finds many sections of the James River in this area to "retain sufficient integrity to convey the appearance of the area during the early 17th century." The integrity finding conforms with the landscape analysis we conducted and provided to the USACE in a letter of September 18, 2014 relative to evocative landscapes along this portion of CAJO. As a property type for NRHP eligibility, we presume the cultural landscape would be considered and put forth as a district.

We find several aspects of the cultural landscape analysis concerning, however. We offer the comments below in an effort to accurately describe the cultural landscape/district.

Exclusion of the National Historic Trail

First, we believe the district should include the directly related Captain John Smith Chesapeake National Historic Trail and trail-related resources. Please consider the following:

- This cultural landscape is precisely the landscape in and through which Captain John Smith launched and ended his historic voyages of exploration, as well as his related shorter trips to interact with American Indians in their settlements along the James.
- The cultural landscape includes four Voyage Stops associated with the trail. These are all mapped trail resources which have also been identified as “high potential historic sites” as they are significant voyage stops within a setting that is highly evocative of the 17th century. The USACE report acknowledges the locations of these stops as the “major starting and stopping point for Captain John Smith and his crew during many voyages.” The USACE notes these stops are on Jamestown Island, which is already listed on the NRHP. (p. 8) Yet, the report does not consider these sites as eligible resources associated with the trail or as contributing to the proposed cultural landscape. Simply because they are contained within the Jamestown cultural landscape does not adequately address them as contributing resources of the trail. They should be identified and evaluated as contributing sites to both the Jamestown cultural landscape and the trail. The effects analysis could be different for each.
- The USACE landscape analysis noted above uses virtually the exact same terminology and criteria for characterizing landscape integrity as is used for identifying and characterizing Evocative Landscapes, a mapped trail resource.
- At least portions of the southern shoreline of the proposed boundary in and around Gray’s Creek, Lower Chippokes Creek, Chippokes Plantation State Park, Hog Island Wildlife Management Area, and Lawnes Creek are highly likely to meet the established criteria for Indigenous Cultural Landscapes (ICL), a trail resource. Areas in and around Jamestown Island, Mill Creek and College Creek are likely as well. (Further discussion of American Indians and the landscape follows.)

The lack of recognition of the trail or trail resources in association with the district contradicts the explicit guidance outlined in the Deputy Keeper and ACHP letters quoted above.

American Indian Components of the Cultural Landscape

Second, it is incomplete to conceive of a contact period cultural landscape in this location without consideration of the American Indian presence at the time. Consider the following:

- The Paspahegh are known to have inhabited the area around Jamestown Island.
- The Quiyoughcohannock were in four towns on the south side of the James. Smith and Jamestown colonists explored this area and met with Chippokes, a leader of the Quiyoughcohannock, in the vicinity of current day Chippokes Plantation State Park. Although Chippokes remained supportive of the English, others of the Quiyoughcohannock resisted the colony so close to their territory.
- Just fifteen miles downstream from Hog Island the Warraskoyack inhabited three towns in the area of the Pagan River. Smith traveled up the Pagan to visit with and trade with the tribe. He described it as “a kingdom on the south side of the river, which is in breadth five miles.” Smith encountered the Warraskoyack multiple times, including September 1607 when returning from Kecoughtan, meeting canoes along the river and trading for corn. In his later writings, Smith

claimed to have been warned by the leader of the Warraskoyack in late 1608 that Powhatan intended to harm him. There is at least one NRHP-listed American Indian archaeological district near the Pagan River. There may well be natural landscape features associated with this district and the trail that expand an eligible district beyond the current boundaries of the archaeology.

- A comprehensive archaeological survey has been completed for Fort Eustis, documenting a wide and extensive array of American Indian archaeological sites. Few other areas along the lower James have been as comprehensively surveyed. However, the extent of American Indian evidence discovered at Fort Eustis is illustrative of the potential of what might be discovered along the other portions of the James River landscape if they were surveyed.
- American Indian life along the James and more broadly in the Chesapeake was riverine focused, especially in terms of transportation and communication. American Indian groups (and then the colonists as well) were traveling extensively on the river in the identified cultural landscape for this purpose. Further, as documented in a variety of sources, American Indian groups relied on aquatic and near-shore resources (oyster and clam beds, fisheries, high-resource marshes, and corn-growing soils near the water) for substantial portions of their diet (see illustration A from Rountree, Clark & Mountford, 2007). Thus, views of and on the river and associated creeks are central to understanding the American Indian landscape. These waterbodies and other associated wetlands and natural feature are essential contributing components of the cultural landscape/district.

All of this points to the substantial American Indian presence in and beyond the identified cultural landscape. There is ample evidence of resources representative of this presence in that landscape. Analysis performed by the USACE supporting the current integrity of the landscape as having the appearance of the early 17th century supports this. As noted above, at least portions of the area are highly likely to meet criteria for Indigenous Cultural Landscapes (ICL), which rely in part on the contact period appearance. The natural landscape features of ICLs would be contributing elements of a district associated with the trail.

The National Park Service recently prepared an annotated map of the lower James to partially illustrate the presence of American Indians, as well as some of the landscape resources they used (see illustration B). The map illustrates: areas known to have been occupied and used by specific American Indian groups based upon historic documentation; cultural landscape resources associated with American Indian use (such as high-resource marshes, corn-growing soils, etc.); existing American Indian archaeological sites; and the limited extent of comprehensive archaeological surveys in the area.

Proposed Cultural Landscape Boundaries

Third, we are concerned about the conclusions drawn regarding proposed boundaries for the Jamestown Island-Hog Island Cultural Landscape (district). The USACE maps a hard boundary for the landscape immediately along the north and south shorelines and at the downstream “end” across the river; the project’s mapped Area of Potential Effect (APE) actually extends substantially beyond these boundaries. The upstream landscape boundary coincides with the APE boundary and is dashed, reflecting its indeterminate extent beyond the APE. Please consider the following:

- The proposed cultural landscape boundary at the shoreline does not incorporate eligible shoreline or land components of the district. It excludes even the land-based components of the shoreline visible from the river that the USACE has determined to have integrity and reflect the appearance of the early 17th century.

Examples of how the cultural landscape extends beyond this boundary include: (1) the viewshed and evocative landscape mapping performed by the National Park Service and previously provided to the USACE; this shows how directly associated land-based components of the 17th century appearing landscape exist beyond the drawn boundary; and (2) areas highly likely to be directly associated with American Indian (and colonial) contact era use of this landscape include at least all or portions of wetlands, shoreline and aquatic resources of Gray's Creek, Crouch Creek, Little Chippokes Creek, Mill Creek, and College Creek; as just one limited example, the map prepared by the National Park Service and included as illustration B, shows at Gray's Creek the high association between known American Indian archaeological sites, high-resource marshes, other landscape features and an area occupied and used by the Quiyoughcohannock -- all immediately opposite Jamestown Island and all excluded from the proposed cultural landscape boundary. This area, as well as multiple other locations within the APE, have high potential for being defined as ICLs.

Further, the boundary omits as-of-yet unsurveyed near-shoreline lands likely to contain archaeological resources with the potential to support understanding of American Indian habitation in this area, the broader context of Jamestown Island, and the significance of the overall cultural landscape.

- The USACE states the proposed cultural landscape boundary crossing the James downstream is "limited to those areas directly associated with early settlement at Jamestown and Hog Island and their maritime approaches. Continuing a boundary south of Skiffes Creek was found to be outside the limits of the early settlement era and would in turn include areas that no longer retain integrity."

As described above, the cultural landscape in this area should not be solely tied to English settlement. The history of Jamestown and John Smith are inseparable from American Indians; so too is this cultural landscape/district.

There is extensive evidence of the early settlement at Jamestown being linked to American Indian communities downstream of the proposed boundary. Interactions with the Warraskoyack are noted above. Portions of the area occupied by the Warraskoyack are within the project APE. A bit beyond the APE, the Nansemond had at least four towns along the Nansemond River. Smith first met with them in 1608 and described them as a "proud, warlike nation." He also described seeing large cornfields along the western shore of the River. In his 1624 publication, Smith told a dramatic tale of forcibly taking corn from the Nansemond by chopping up their dugout canoes until they agreed to the trade. This further illustrates the connectivity of the American Indian landscape and English settlers.

Consideration of the cultural landscape boundary must be based in part on the American Indian components of the landscape. As this has not yet occurred, drawing a firm downstream boundary is premature. As the APE extends to the vicinity of the Pagan River and there is significant evidence of American Indian occupation and resources in that vicinity--and interactions with the Jamestown colonists--it is at least conceivable the cultural landscape extends to this area. Alternatively, there could be another separate eligible cultural landscape/district within the APE in that locale.

Further, the conclusion that a broader proposed boundary would include areas which no longer retain integrity is premature. First, an integrity evaluation cannot precede the full definition of the resources central to the cultural landscape; in this case the omission of the American Indian

components makes that premature. In addition, even if an integrity assessment were timely the landscape assessment included as Attachment A in the USACE report and review of digital imagery of shoreline lands clearly suggests portions of the downstream landscape retain an appearance of the early 17th century.

While the cultural landscape boundaries proposed by the USACE constitute a minimum extent of the landscape/district, it is simply not clear they constitute a sufficient extent. Based on inclusion of unconsidered but linked resources and additional assessments it is highly likely the landscape goes beyond the drawn solid lines and includes larger portions of the APE.

Summary

In sum, the cultural landscape/district should encompass all of the character-defining features, trail resources and extent of a larger district reflective of:

- the clear association between the landscape, Captain John Smith's historic voyages and the national historic trail;
- the complex nature of contact period European-American Indian interactions in this area--and the clear association between American Indians, this cultural landscape and the national historic trail; and
- outer boundaries--which in some cases may appropriately be as yet undetermined--consistent with this set of resources.

Other Comments Regarding the Section on the Captain John Smith Chesapeake NHT:

While our comments above on the proposed cultural landscape/district clearly draw the intimate association between the landscape and John Smith Trail resources, we must further address other aspects of the USACE document that concern the trail.

Commemoration

On page 5 of the document, the USACE discusses the national historic trail as a "commemorative property." First, this incorrectly characterizes the trail as solely commemorative. As we have pointed out in prior documentation, the trail -- and the National Trails System Act -- have a purpose and function that also go beyond commemoration and include recreation and resource protection. This is clearly addressed in detail in the trail *Comprehensive Management Plan* (NPS, 2011) and trail *Conservation Strategy* (NPS, 2013). Further, it is evident in the Act; a national historic trail "*promotes the preservation of, public access to, travel within, enjoyment, and appreciation of the open-air, outdoor areas, and historic resources of the United States*" (emphasis added).

That said, it is interesting the document characterizes the trail as commemorative as a perceived argument against eligibility. The document cites NRHP Criteria Consideration "f" which states a commemorative property can be eligible "if design, age, tradition, or *symbolic value* has invested it with its own exceptional significance" (emphasis added).

The 2006 feasibility study conducted to explore the trail's national significance confirmed in five separate statements the route's symbolic value -- as a symbol of: 1) the independence of the English colonists from Powhatan's control; 2) the impact on and eventual collapse of the Powhatan polity and the Native peoples' lifeways in the Chesapeake Bay and beyond; 3) the spirit of adventure and wonder that were important components of Smith's voyages and English exploration; 4) England's trading power, soon to

be increased by the production of tobacco for export from the colony; and 5) the long-term impact on and cultural contact between the Native peoples and European colonists.

The National Park System Advisory Board went on to confirm the determination of national significance, and the United States Congress established the national historic trail on this basis. This would seem clear evidence of symbolic value creating exceptional significance.

National Historic Trail Corridor

The USACE states on page 7 that the trail corridor "... is located generally in the center of the James River." This is incorrect. The trail *Comprehensive Management Plan* and trail *Conservation Strategy* define the trail route and the trail corridor. The *trail route* is comprised of the waterways Smith travelled during his 2007-2009 voyages, plus the four additional water route segments added in 2012 through Secretarial order. Smith's voyage routes were identified during the trail *Feasibility Study* process based on the best scholarly research. Along the river portions of the trail route, the width of the route extends along the full breadth of the river (shoreline to shoreline).

The *trail corridor* surrounds the trail route. It encompasses the land and water within the viewshed of the trail route and the trail-related resources within the corridor; it also includes certain trail-related resources beyond, but contiguous to the viewshed. Together, these resources contribute to the national significance of the trail, and define the character of the landscape that shapes the visitor experience. See illustration D for a conceptual diagram of the trail corridor.

Association of National Historic Trail Resources with "Historic Events"

Page 9 of the USACE document states the majority of the national historic trail between Jamestown and the Pagan River contains only evocative landscapes as trail resources. Further the document states these have no direct connection with Smith's voyages as no significant historic events took place along them. Based on these factors, the USACE concludes there are no eligible resources in the area and the trail as a whole is ineligible within the APE.

First, we trust the information provided in the preceding pages makes clear that there are substantially more trail related resources between Jamestown Island and the Pagan River than just evocative landscapes and sites on Jamestown Island. It would be redundant to repeat that information here.

Second, we must address the characterization that "no significant events associated with the voyages of Captain John Smith [took place] apart from being along the route of the voyages."

Each of the entire voyages (June 2 to July 21, 1608 and July 24 to September 7, 1608) constitutes a significant continuous historic event. These events were determined to be nationally significant. If this were not the case Congress would most certainly not have established the national historic trail. The landscape features along this route--regardless of whether Smith made mention of an activity at a specific site or not--constitute the location, context and setting of the event. Mapped documentation of current natural landscape features show that many portions of this context and setting retain their integrity today.

Integrity Analysis Downstream of the Proposed Cultural Landscape

The USACE has already accepted the integrity of natural landscape features as fact within the proposed cultural landscape boundaries when determining that many sections of the area retain the appearance of the early 17th century. We agree. Yet, we have used the same methods to map and assess the same types of landscape features downstream of the proposed district and found similar levels of integrity in various locations. However, the USACE document asserts the areas within the APE outside the proposed

cultural landscape boundary lack integrity without presenting any clear integrity analysis of those areas. In fact, attachment A in the USACE report seems to contradict the assertion, mapping extensive stretches of shoreline landscape types as dominated by “forest” and “marsh” in this area.

It is difficult to reconcile how the USACE can conclude on page 1 that the national historic trail is ineligible because the “integrity of setting and feeling of many” of its associated properties is “compromised.” In the proposed district the document *asserts integrity* and beyond the proposed district boundary there appears to be *no substantiated integrity analysis*.

Conclusion:

We offer all of the comments above in the spirit of ensuring the cultural landscape/district identification and analysis is consistent with our reading of the Deputy Keeper and ACHP guidance. While we again commend the USACE for recognizing an important NRHP-eligible cultural landscape, the basis for and extent of this district requires refinement to address the significant resources and issues described above.

Illustration A: This illustrates the direct relationship between American Indian cultural landscape resources and the riparian environment.

A STREAM VALLEY IN CROSS SECTION

showing the locations of the various plant and animal resources the native people utilized. (Helen C. Rountree)

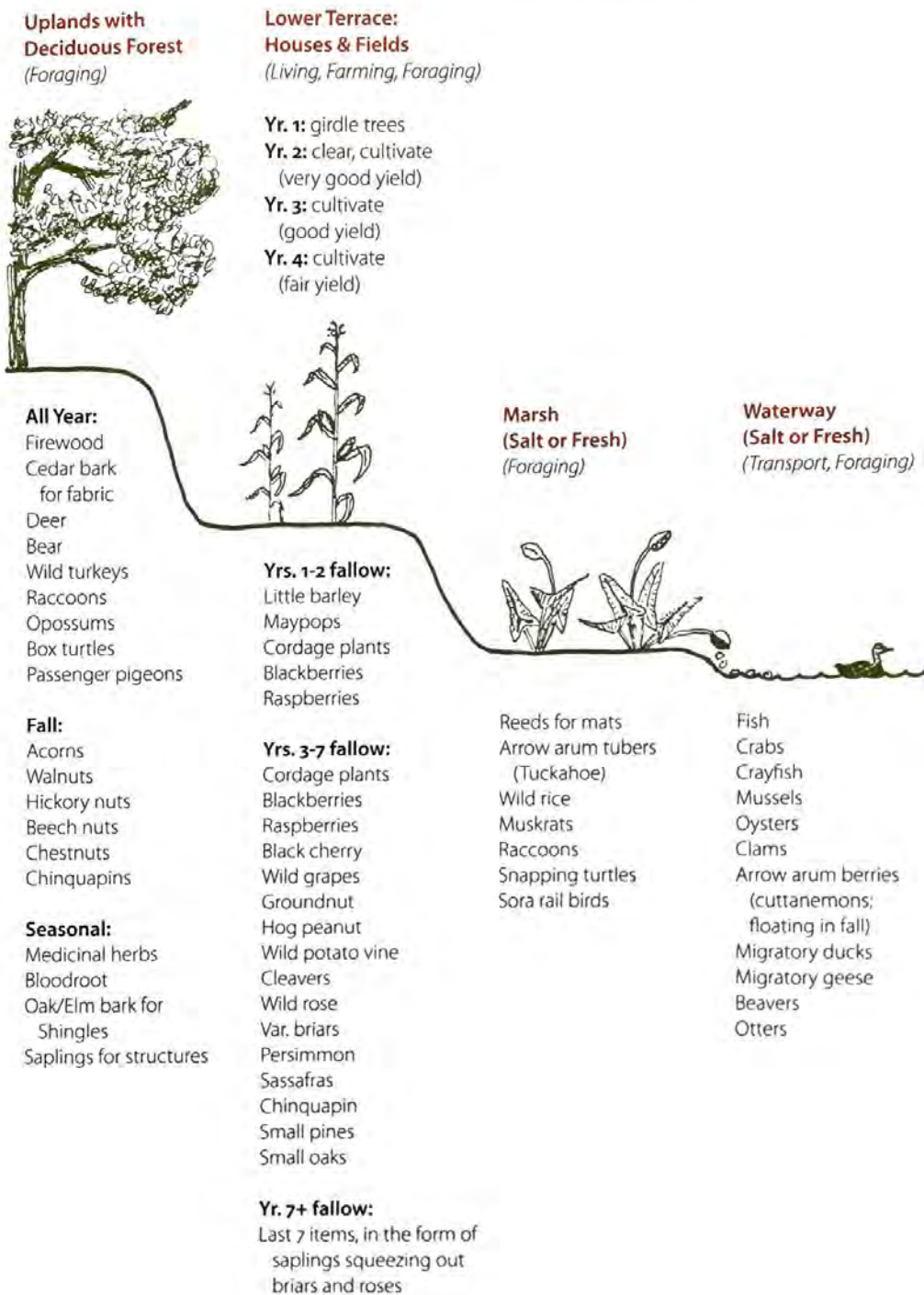
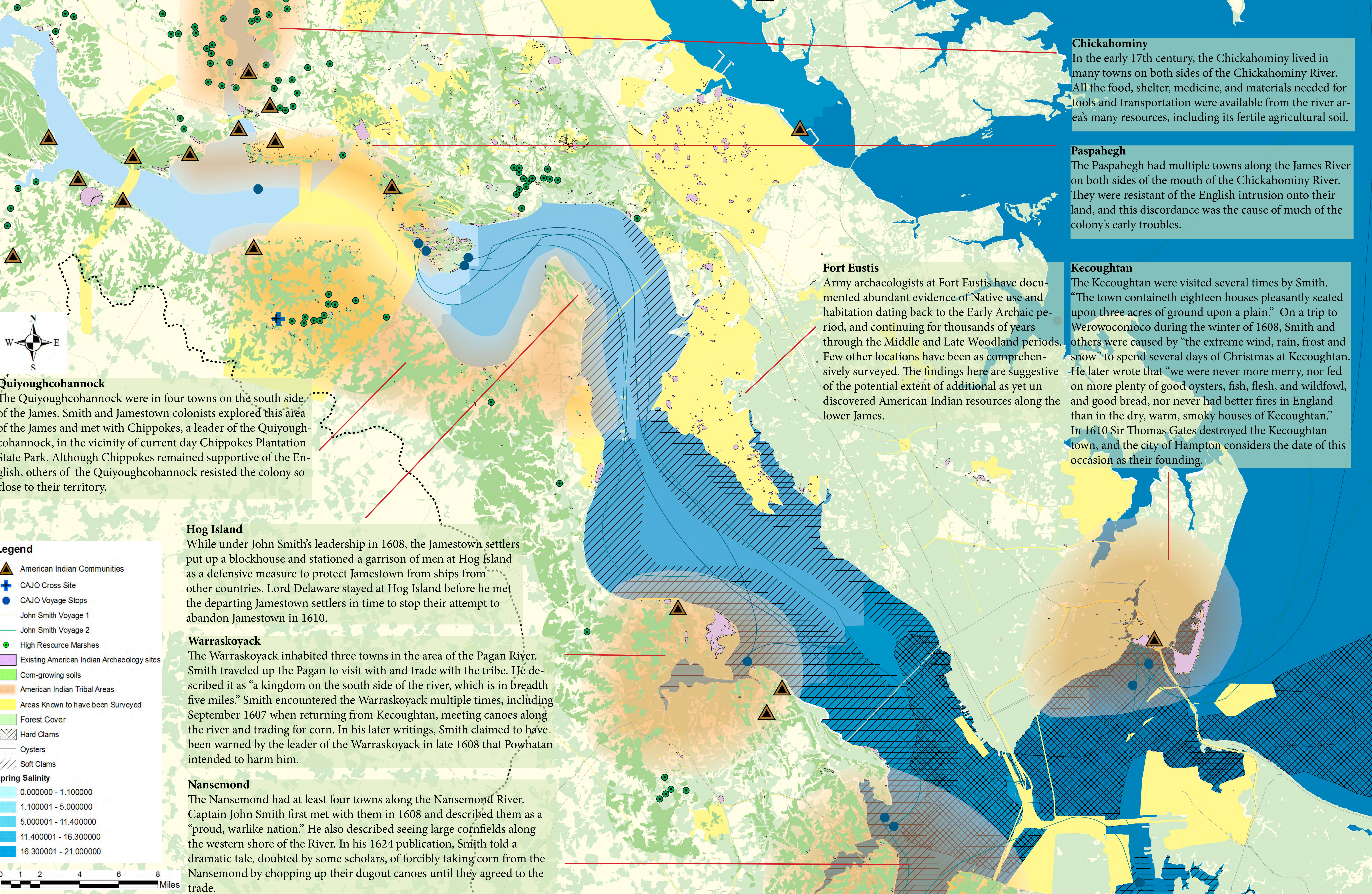


Illustration B: Illustration of patterns of American Indian use and occupation along the Lower James segment of the Captain John Smith Chesapeake NHT.

See following page.

American Indian Use and Occupation in the Lower James River Landscape



Overview

By 1607, the area of the tidal James River was occupied by some eleven Algonquian-speaking American Indian nations: the Chesapeake, Nansemond, Kecoughtan, Warraskoyack, Paspahegh, Chickahominy, Quiyoughcohannock, Weyanock, Appamattuck, Arrohatock and Powhatan. Communities were numerous, with more than sixty documented by Smith and through subsequent research. Life was riverine focused, with communities located adjacent to the water and close to resources on which the peoples depended, such as food-rich marshes and good corn-growing soils. Rivers and creeks were also central to transportation and communication.

Those in the general vicinity of Jamestown and along the lower James interacted with each other regularly. Although Powhatan himself said he did not have control over these communities, some were reported to regularly pay tribute to him, and the English assumed it was true of all except the Chickahominy. According to accounts reported by the early settlers, tribal reactions to the English incursion in the lower James varied, with some willing to trade, and others described as "enemies".

Members of the Chickahominy and Paspahegh along the James, as well as the Kiskiack, Youghtanund, Pamunkey, and Mattaponi from the York River area, were said to have been among those in the party led by Opechancanough that captured John Smith in the winter of 1607, and eventually took him to Powhatan at Werowocomoco.

Riparian Resources

Corn-Growing Soils

Naturally occurring fertile soils for corn-growing were level or nearly so, well-drained, and easy to work with digging sticks -- the criteria for Class I soils. There is evidence that Indian women also sought soils with low water tables that warmed early in spring. Warm Class I soils correlate closely with positions of Indian towns on Smith's map along alluvial floodplains.

High Resource Marshes

These were marshes large enough and rich enough in tuber-producing tuckahoe, spatterdock and seed-producing wild rice that several extended families could be fed for weeks if not months on the harvest. They were also the source of shellfish, fish, and birds during some times of the year.

Oysters, Clams and Fish

Fish and shellfish were important components American Indian diets. Oyster beds and hard clams were extensive in the lower James. Oyster shells are found in many archaeological sites, sometimes in abundance. It is thought that groups such as the Nansemond who had a large population but no tuckahoe to rely on in poor crop years used the abundant nearby shellfish. Men used fish weirs for trapping fish much of the year, especially during anadromous fish runs.

Illustration C: Illustration of the types of natural and cultural resources and landscape features in one high-probability Indigenous Cultural Landscape (ICL) area.

See following page.

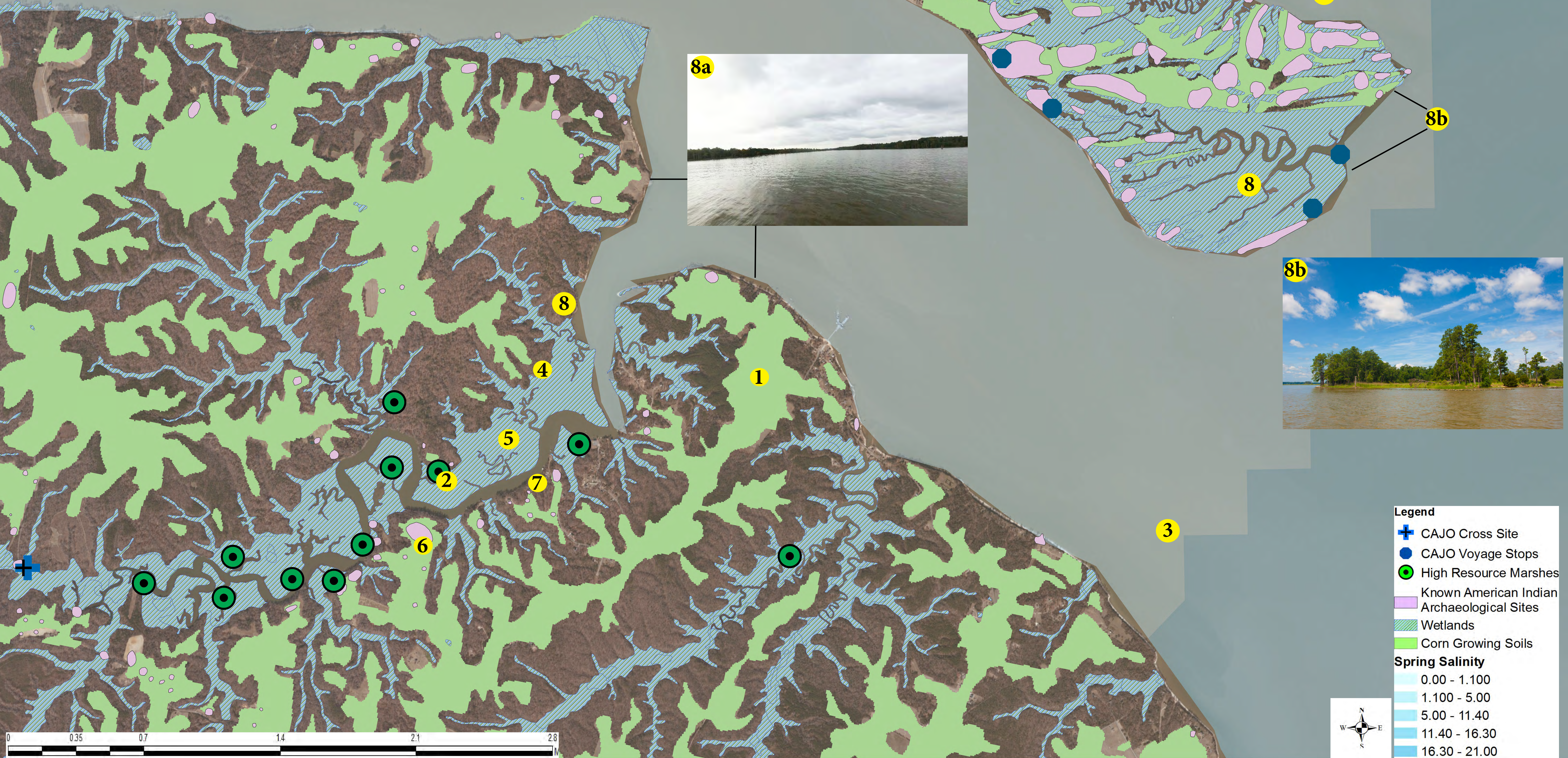
Cultural & Natural Resources in a High-Probability Indigenous Cultural Landscape

Map Includes Protected Data - Not for Public Distribution

Overview:
This map illustrates the types of natural and cultural resources and landscape features in one high-probability Indigenous Cultural Landscape (ICL) area. Further on-site assessment would be required to confirm this information. However, this serves as an example of landscape features associated with American Indian use in one location along the lower James segment of the Captain John Smith Chesapeake NHT. There are other example locations and high-probability ICLs nearby as well.

A more detailed ICL study would identify the probable locations for protection from wind, and landing places that a community utilized, based on the proximity of other geographic features, known archaeological findings, and input from experts and descendant communities.

Waterways and Orientation to them:
Chesapeake ICLs are typically associated with waterways. Life was riverine focused, with communities located adjacent to the water and close to resources on which the peoples depended, such as food-rich marshes and good corn-growing soils. Rivers and creeks were also central to transportation and communication. The pattern of resources and features in this view are illustrative of this.



- 1 Corn Growing Soils:**
Naturally occurring fertile soils for corn-growing were level or nearly so, well-drained, and easy to work with digging sticks -- the criteria for Class I soils. There is evidence that Indian women also sought soils with low water tables that warmed early in spring. Warm Class I soils correlate closely with positions of Indian towns on Smith's map along alluvial floodplains.
- 2 High-Resource Marshes:**
These were marshes large enough and rich enough in tuber-producing tuckahoe, spatterdock and seed-producing wild rice that several extended families could be fed for weeks if not months on the harvest. They were also the source of shellfish, fish, and birds during some times of the year.
- 3 Anadromous fish:**
Spawning anadromous fish were an essential resource for American Indians. Every spring the fish would run into the rivers seeking lower salinities and spawn providing resources for American Indians and the river.
- 4 Uplands & Lowlands:**
The uplands and deciduous forests were utilized as the primary hunt and foraging grounds for things like food and medical herbs. The lowlands were the primary living and farming locations due to the abundance of resources and ease of land cultivation.
- 5 Wetlands & Freshwater Sources:**
Freshwater wetlands are a vital resource to indigenous cultures providing drinking water, food, and building resources. Some wetlands are more productive than others allowing them to be classified as high resource marshes.
- 6 Archaeology:**
There are many documented American Indian archaeological sites. However, a relatively small fraction of the landscape has been subject to class I archaeological surveys. Thus, there are likely many more sites in existence than currently known. The extensive number of American Indian sites along Gray's Creek and on Jamestown Island substantiates the indigenous occupation of this ICL.
- 7 Terraced Landforms:**
Natural terraces above but near waterways and other resources provided optimal locations for settlement areas. Archaeological evidence just along and above Gray's Creek is illustrative of American Indian use of such locations.
- 8 Current Landscape Integrity:**
Current land cover indicates the extent to which the landscape retains an appearance similar to the early 17th century. Open waterways, wetlands, and forested areas are typical. In addition, agricultural land, despite changes in farming practice, can contribute to an ICL. Among other locations, views of Gray's Creek, lower Jamestown Island and Back River substantiate the integrity of this high-probability ICL.

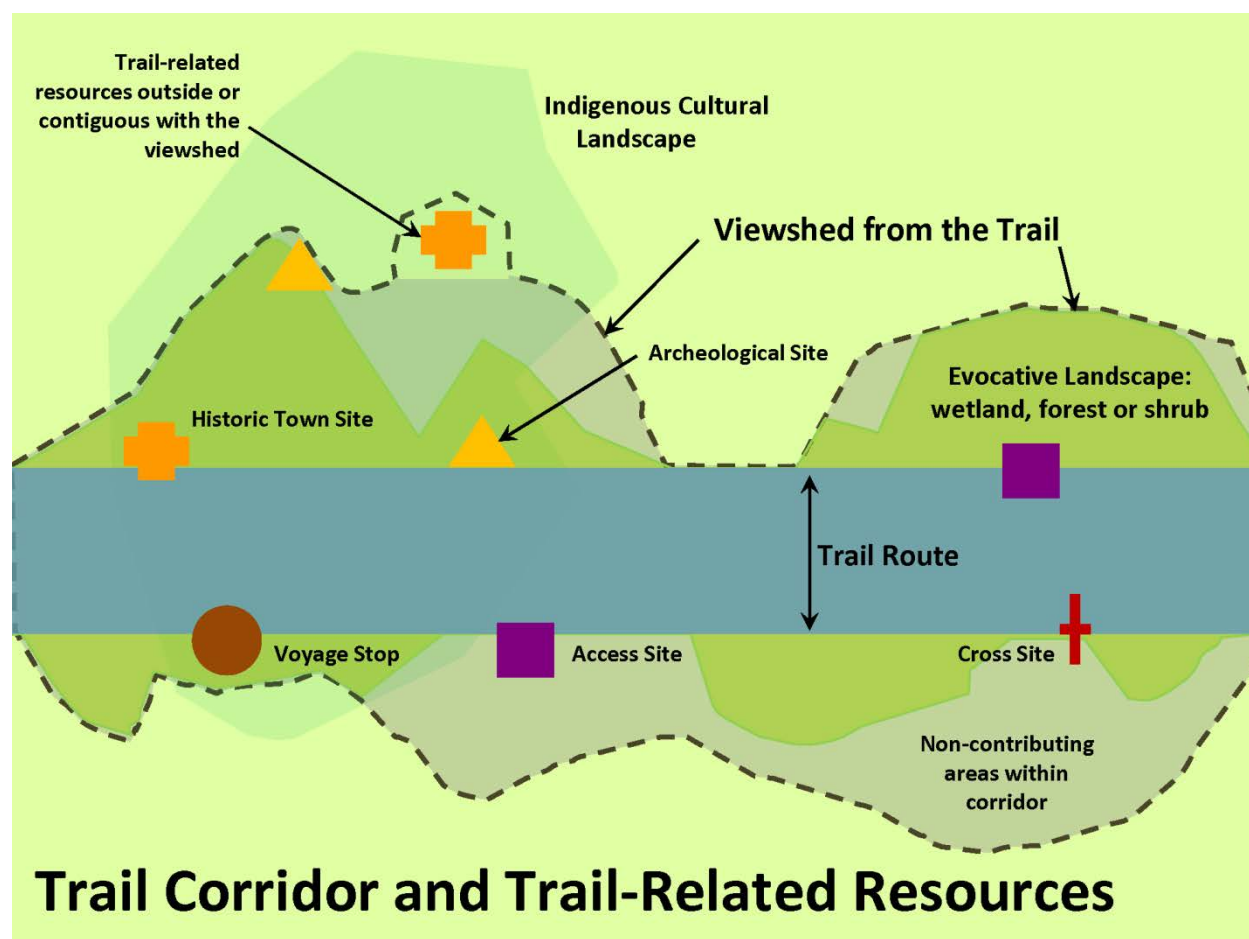
Legend

- CAJO Cross Site
- CAJO Voyage Stops
- High Resource Marshes
- Known American Indian Archaeological Sites
- Wetlands
- Corn Growing Soils

Spring Salinity

0.00 - 1.100
1.100 - 5.00
5.00 - 11.40
11.40 - 16.30
16.30 - 21.00

Illustration D: This conceptual diagram illustrates the Captain John Smith Chesapeake NHT trail corridor and its associated resources.



Along the river portions of the *trail route*, the width of the route extends along the full breadth of the river (shoreline to shoreline) and includes some tributary creeks. The *trail corridor* surrounds the trail route. It encompasses the land and water within the viewshed of the trail route and the trail-related resources within the corridor; it also includes certain trail-related resources beyond, but contiguous to the viewshed. Together, these resources contribute to the national significance of the trail, and define the character of the landscape that shapes the visitor experience.

In some circumstances, the presence of trail-related resources may extend the trail corridor beyond the viewshed. One example would be the location of a known 17th century American Indian archaeological site associated with the trail. Due to area topography the full extent of the site may not fall within the viewshed from the water; however, it would be considered within the trail corridor. One well known archaeological site associated with Powhatan and interactions with John Smith extends at least 1,600 feet back from the waterway.

Some portions of the trail corridor within the viewshed may be non-contributing. This would be the case where there are no documented trail-related resources within the viewshed. An example would be where modern development visible from the trail route has degraded the integrity of the view such that it cannot be considered an evocative landscape.