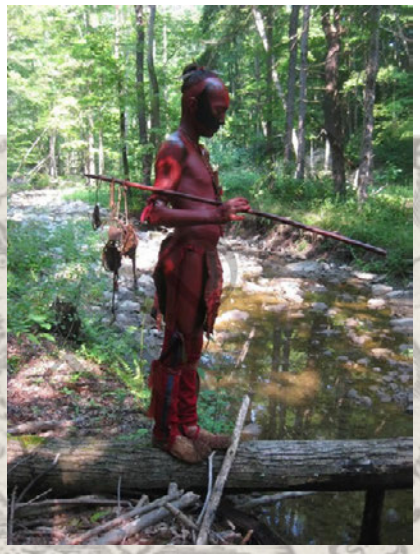
Indigenous Cultural Landscape Study of the Chester and Sassafras River Watersheds



REPORT SUBMITTED TO
THE NATIONAL PARK SERVICE
THE CHESAPEAKE CONSERVANCY

28 December 2022

BY

JOHN L. SEIDEL, PhD

WITH CONTRIBUTIONS FROM

CHARLES FITHIAN
ELIZABETH AIELLO SEIDEL
MADISON KAYE
THE LENAPE TRIBE OF DELAWARE
THE NANTICOKE INDIAN ASSOCIATION

PAST IS PRESENT ARCHAEOLOGY LAB
CENTER FOR ENVIRONMENT & SOCIETY
WASHINGTON COLLEGE
CHESTERTOWN, MARYLAND

Acknowledgements

Any study of the scope encompassed by this Indigenous Cultural Landscape relies upon a professional team and the support and wisdom of community partners. First, we want to thank the first peoples to have stewarded this land, the Tockwogh, the Wicomiss, and the Matapeake. They left an indelible mark and a legacy that we hope this study will help to make more visible. We also wish to thank today's Native peoples who helped us in thinking about this work: the Nanticoke Indian Association, with the leadership of Chief Natosha Carmine and contributions from Desmond & Teresa Boykin, Raggatha Calentine, and Sterling Street; and the Lenape Tribe of Delaware, particularly Chief Dennis Coker.

Our partners at the Chesapeake Conservancy and the National Park Service made this work possible, providing sound guidance and many thoughtful suggestions. Gabriel Roffe, Manager of Equity and Community Engagement at the Chesapeake Conservancy, served as the program officer for this project, and Cindy Chance, Cultural Anthropologist and Trail Administrator of the National Park Service's Captain John Smith Chesapeake National Historic Trail, served as the NPS liaison, while offering sound advice based on her experience with other ICLs. We especially thank them for their extraordinary patience with a process that was prolonged by the COVID-19 pandemic.

We owe a debt to the many other scholars who have investigated our study area over the years, contributing to our understanding of the earlier indigenous peoples in this area. William Marye and C.A. Weslager were pioneers in the field, working through the mid-20th C., while Steve Wilke and Gail Thompson undertook the first regional surveys for archaeology in the study area in the 1970s. This was followed by the intensive work of Darrin Lowery, first on his own in Queen Anne's County and then with Washington College's Public Archaeology Lab, helping to generate an archaeological predictive model for the Upper Eastern Shore and leading surveys to ground-truth the model in Kent County. Jay Custer and his colleagues from the University of Delaware have examined specific sites in the watersheds and also contributed to a synthetic understanding of regional prehistory. As the doyen of Algonquian archaeology and history in the Chesapeake, Helen Rountree's many works are indispensable; for the Eastern Shore, her collaboration with Tom Davidson remains a foundational work. Archaeologists from the Maryland Historical Trust, such as Wayne Clark, Dennis Curry and Maureen Kavanagh, have made important contributions to our understanding, and the Trust's MEDUSA GIS is an indispensable research tool. Daniel Griffith's work on native ceramics was most helpful, and we especially thank him for his generosity in sharing his recent and as-yet unpublished work on ceramics from the Wilke-Thompson surveys of the 1970s. Our conversations with Dan stimulated much thought about the later phases of the Native-European contacts in this region. Dan also allowed us the use of several photographs that help illustrate these issues. Credit for the photograph on the cover goes to Amanda McNaughton.

Finally, I extend my profound thanks to the team from Washington College's Past Is Present Archaeology Lab for all of their work on this study: Elizabeth Seidel for her primary research, careful editing, and creative thinking on all aspects of this study, as well as for her critical role in so many earlier archaeological projects that have informed this work; Chuck Fithian for his exhaustive review of the Maryland State Archives, the thorough scouring of other sources, and his ability to pull in obscure but illuminating details; and Madison Kaye for her skill in assembling the Geographic Information System that accompanies this report.

We hope that this study will be useful to the National Park Service and the Chesapeake Conservancy, as well as to the heirs of the broader Algonquian legacy. If successful, this work will highlight a remarkable and vibrant indigenous way of life, while reminding us of what a prolific environment the Chesapeake and its tributaries were and are. If this study helps to spread a greater awareness of this rich cultural and environmental history and spurs greater efforts to preserve the legacy, it will have succeeded.

John L. Seidel
Chestertown, Maryland

Table of Contents

List of Figures

List of Tables

CHAPTER 1
INTRODUCTION

This project, focused on the Chester & Sassafras Rivers (bordering Kent County, Maryland, on the south and north – Figure 1.1), continues a long-term effort by the National Park Service to identify Indigenous Cultural Landscapes (ICL) in the region. Indigenous cultural landscapes are defined as "landscapes [that] generally encompass the cultural and natural resources and the wildlife within them that would have likely been associated with and supported the historic lifestyle and settlement patterns of American Indian peoples, and exhibited the cultural or esthetic values of American Indian peoples at the time of early European contact." (Project Scope of Work n.d.).

Since 2013, ICLs have been defined and mapped for portions of the Nanticoke River (Sullivan *et al*. 2013), Mattawoman and Nanjemoy Creeks (Strickland *et al*. 2015), the Rappahannock River (Strickland *et al*. 2016) and the York, Pamunkey, and Mattaponi Rivers (Strickland *et al*. 2019). Additional work has been done on the Susquehanna River (Faull *et al*. 2015). In 2015, the greater Chesapeake Bay watershed (primarily the areas where the Captain John Smith Chesapeake National Historic Trail extends) was reviewed for the potential to contain indigenous cultural landscapes. This work identified the Chester River watershed as an area of the highest priority (Strickland and King 2016). The Sassafras River also has great significance and potential, so it was included in this scope of work.

Part of the utility of these studies lies in the areas of land conservation, public access, and preservation of the Chesapeake Bay (National Park Service 2011). The ICL model is a tool for public engagement, particularly with regard to educational benefits. Those benefits include learning about descendant indigenous communities and the relationships of these communities with the land. ICL research allows the National Park Service (NPS) to prioritize additional applications for tribal partners and trail visitors. A hallmark of ICL research has been the engagement of contemporary tribal governments, enabling them to use the results to reconnect with and visit landscapes that were important to elders and ancestors, to teach tribal citizens, and to make their interests known to local government land planners and conservationists. Also important is the aim of applying ICL research findings to interpretive and educational programming. All of the work carried out for this project has kept these objectives in mind.

Regional archaeology makes it clear that the Native American presence in the project area extends back to Paleoindian times, at least 13,000 years ago and perhaps 18,000 BP or earlier. Abundant archaeological evidence for indigenous habitation along the Chester and Sassafras Rivers has been recovered, including lithics characteristic of the end of the Pleistocene and later materials up to and including European contact. Predictive modeling has highlighted the changing nature and location of habitation and activity sites over time (Seidel *et al*. 2004, 2007; Seidel and Lowery 2008).

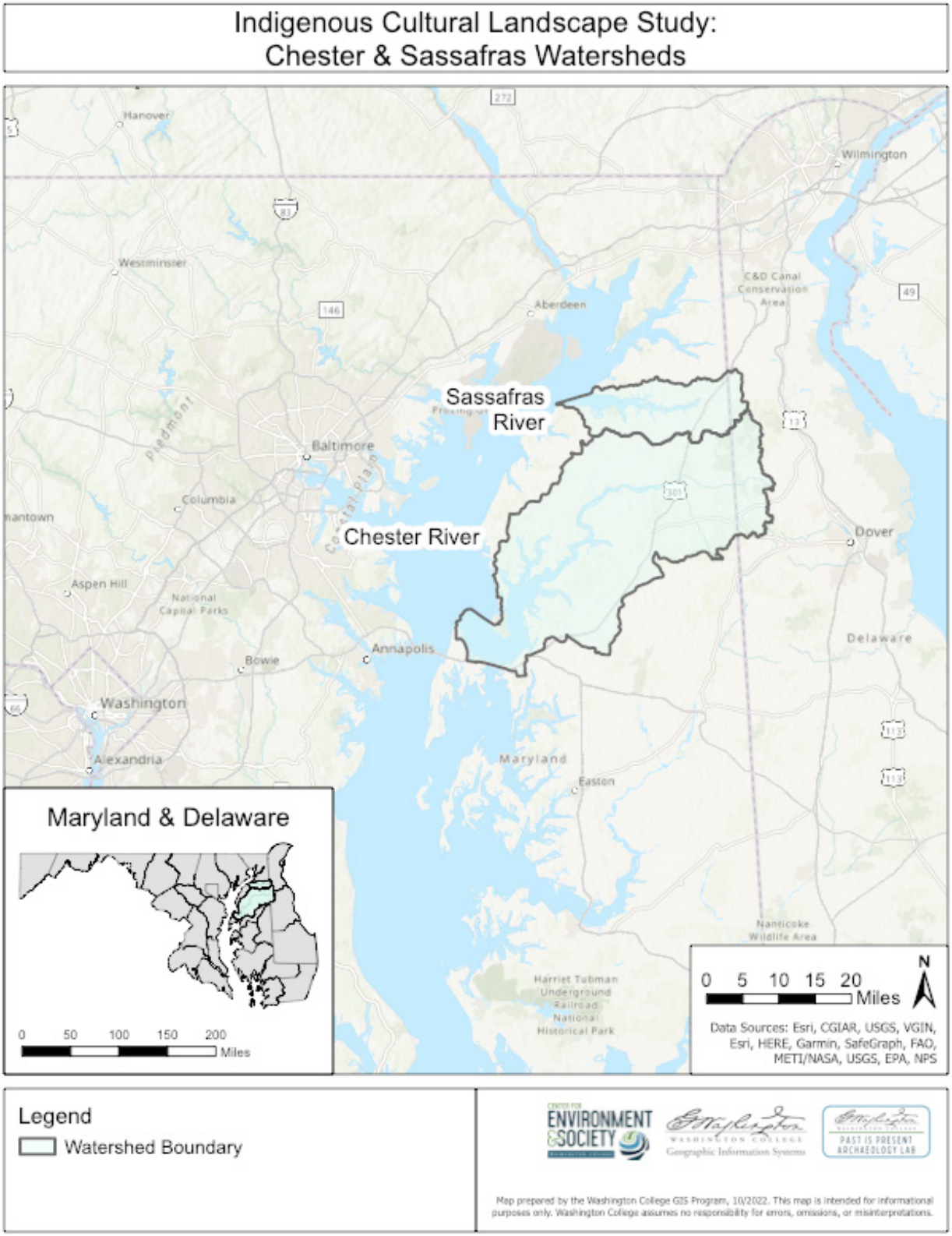


Figure 1.1: Locator Map and Project Area

The earliest written records to record the identity of indigenous peoples in the project area are in the voluminous writings of Captain John Smith, who visited the upper Chesapeake Bay in 1608. His narratives have been conveniently drawn together by Philip Barbour (1986) in a three-volume compilation that was used in this project. Other documentary sources include traveler narratives (such as those by George Fox, Jasper Danckaert, and Andreas Hesselius), early geographic descriptions (e.g. White 1899, Alsop 1666), period maps, and official documents such as those in the Maryland Archives. As will become clear in this report, the documentary record is remarkably slender for this region, and the Native inhabitants were forced out fairly quickly, so that the historical record is distressingly silent. Because of the early removal of Native peoples and their subsequent history, there are no clear descendant populations left in the area**.** This, too, is a constraint, as the oral traditions and memories of such populations can be so informative. As a result, archaeological research becomes an important fallback, with excavated evidence of past behavior and lifeways moving to the fore. Here, too, there are constraints, in terms of the unevenness of archaeological research through the project area and the limited nature of that work. As a result, this project relies on the limited evidence noted above, supplemented with analogy, comparison, and judicious application of information gleaned from nearby areas.

Research Questions & Methodology

Research questions posed by the National Park Service in the preparation for this project included the following:

1. What landscapes are protected?
2. What landscapes are threatened by development, climate change, and other factors?
3. What portions of the represented ICL are appropriate for interpretive and educational programming?
4. Where are the public access points for observing evocative landscapes, particularly at waterfront areas, including opportunities for walking along the shoreline?
5. What can be said in these landscapes about the history and deep history of indigenous people?
6. What can be said in these landscapes about the significance of places to contemporary tribes today?
7. What is known about the history of indigenous use of the Chester and Sassafras River watersheds?
8. What is known about the history of dispossession of indigenous people from the study area? Was the introduction of European commodities a factor in the displacement?
9. Was this area lightly inhabited pre-contact as some people suggest?
10. How were indigenous people disassociated from the land?
11. On the Sassafras River, as far as Millington, were there shad runs? Fishing camps? Other evidence of seasonal fishing and anadromous species?

All of these questions have been addressed, using both previously established methodologies for ICLs and approaches developed specifically for this project. Methodologies for ICLs evolved over time, as illustrated in the work of Sullivan *et al.* (2013a) and used for the Nanticoke watershed, the Nanjemoy and Mattawoman watersheds (Strickland, Busby, and King 2015), the Rappahannock watershed (Strickland *et al*. 2016), and the York, Pamunkey, and Mattaponi (York) rivers (Strickland *et al*. 2019). This project relies upon these earlier studies as a guide, but like previous workers, we have had to adapt the approach to the peculiarities of this specific project area, especially given the constraints noted above.

Cultural Landscapes

Cultural landscapes are defined by the National Park Service (Birnbaum 1994) as "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values."

Indigenous Cultural Landscapes are defined by the National Park Service (n.d.) as representing:

> …large landscapes from the perspective of American Indian nations. They are characteristic of the natural and cultural resources that supported American Indian lifeways and settlements" (National Park Service n.d.).
>
> Indigenous Cultural Landscapes are places where uniquely Indigenous perspectives can be understood and applied in land-management decisions. For example, when studying these landscapes, researchers must understand that American Indian places were not confined to the sites of houses, towns, or settlements. The American Indian view of one's homeland is holistic rather than separated into elements typically used in our language today, such as "hunting grounds," "villages," or "sacred sites."

Study Area and Temporal Boundaries

The area covered by this project (Figure 1) encompasses two watersheds, that of the Sassafras River to the north and the Chester River to the south. While the bulk of the area lies in Maryland, the headwaters of both rivers extend east into neighboring Delaware. The time frame studied extends roughly from 900 CE, the beginning of the Late Woodland Period, to the present. Native Americans certainly were in the project area long before the Late Woodland, but our focus has been on their more recent past. Nonetheless, archaeological resources from throughout the Woodland Period (i.e., back to 500 BCE) have been considered at various points in this study.

Tribal Consultation

The absence of a clear descendant population in the region made tribal consultation more difficult than it was for ICL researchers in southern Maryland. However, as the Native peoples of this project area were displaced and moved about after contact and colonization by Europeans, they often found themselves refugees among neighboring groups. The extent to which they then joined or were assimilated into these groups is not well documented, but it is likely that individuals and family grouping did so, eventually losing their original tribal identity in the process of joining these neighboring groups. We made contact with the Lenape Tribe of Delaware (Chief Dennis Coker), the Nanticoke Indian Association (Chief Natosha Carmine), and the Nause-Waiwash Tribe (Chief Donna Abbot). Other commitments precluded the involvement of the Nause-Waiwash, but meetings were held with the Lenape Tribe of Delaware and the Nanticoke Indian Association, providing much valuable information and insights on the hopes of Native peoples for this study.

ICL Criteria

The Captain John Smith Chesapeake National Historic Trail's Comprehensive Management Plan (National Park Service [NPS] 2011) sees ICLs as representing "the context of the American Indian peoples in the Chesapeake Bay and their interaction with the landscape." These landscapes include "both cultural and natural resources and the wildlife therein associated with the historic lifestyle and settlement patterns and exhibiting the cultural and aesthetic values of American Indian peoples in their totality" (NPS 2011).

The Comprehensive Management Plan (NPS 2011) laid out a set of basic criteria for identifying important landscapes:

- Good agricultural soil (fine sandy loam, 1-2% grade)
- Fresh water source (river or creek water may be brackish)
- Transportation tributary adjacent
- Landing place (confluence of tributaries optimal)
- Marshes nearby (for waterfowl, shellfish, reeds, tubes, muskrat, turtles)
- Brushy areas (for small game, berries)
- Primary or mixed deciduous forest (for larger game, nuts, bark, firewood)
- Uplands that could support hunting activities (and a variety of wildlife)
- Proximity to known American Indian communities (documented through ethno-history or archaeology; may be post-Contact)
- Protection from wind
- High terrace landform

Criteria for smaller or connective parcels include:

- Areas of recurrent use for food or medicine acquisition (shell middens, plant gathering sites)
- Areas of recurrent use for tool acquisition (quarries)
- Places with high probability for ceremonial or spiritual use (even if not documented), or known by descendent community to have been used for ceremony
- Trails used as footpaths (usually became colonial roads, sometimes are today's highways and local roads)
- Parcels that can be interpreted as supporting activities of Indian community sustainability, such as trading places or meeting places
- Places associated with ancestors, or part of a descendent community's past known through tribal history, ethno-history, or archaeology

Some of these criteria are similar to the criteria used our development of a predictive model for the region, beginning in 2006 (Seidel 2007). That effort started with an assessment of landforms and places called "focal points" for settlement, assessments of ecological diversity that were attractive to Native peoples, while also considering soils as the underpinning to ecological factors. These overlapping criteria are important in establishing the ICL, along with the predictive model.

Figures 1.2 through 1.6 offer a variety of base-mapping for the study and may be useful throughout the report. All of these and other data are included in a GIS for this indigenous cultural landscape study.

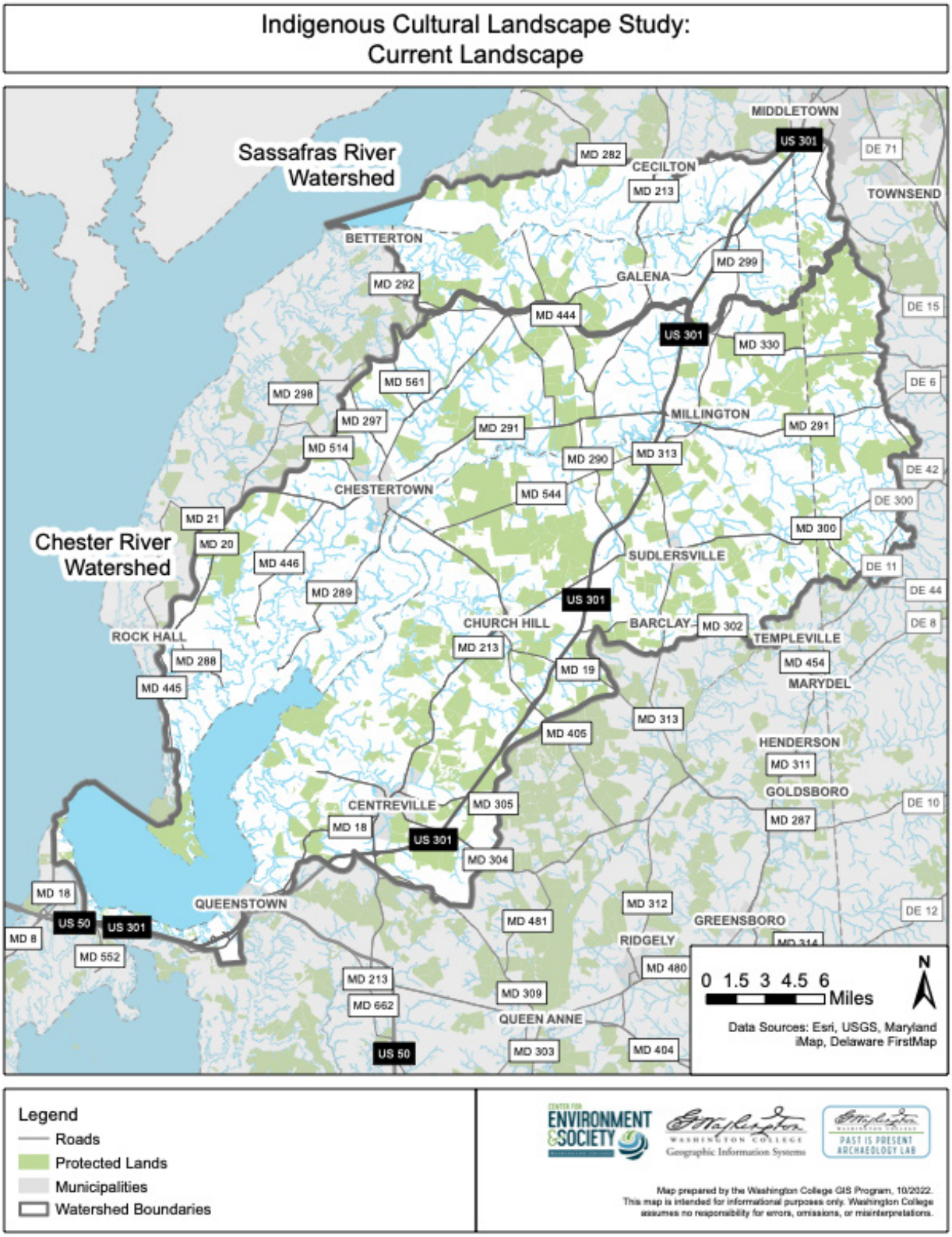


Figure 1.2: Project Area

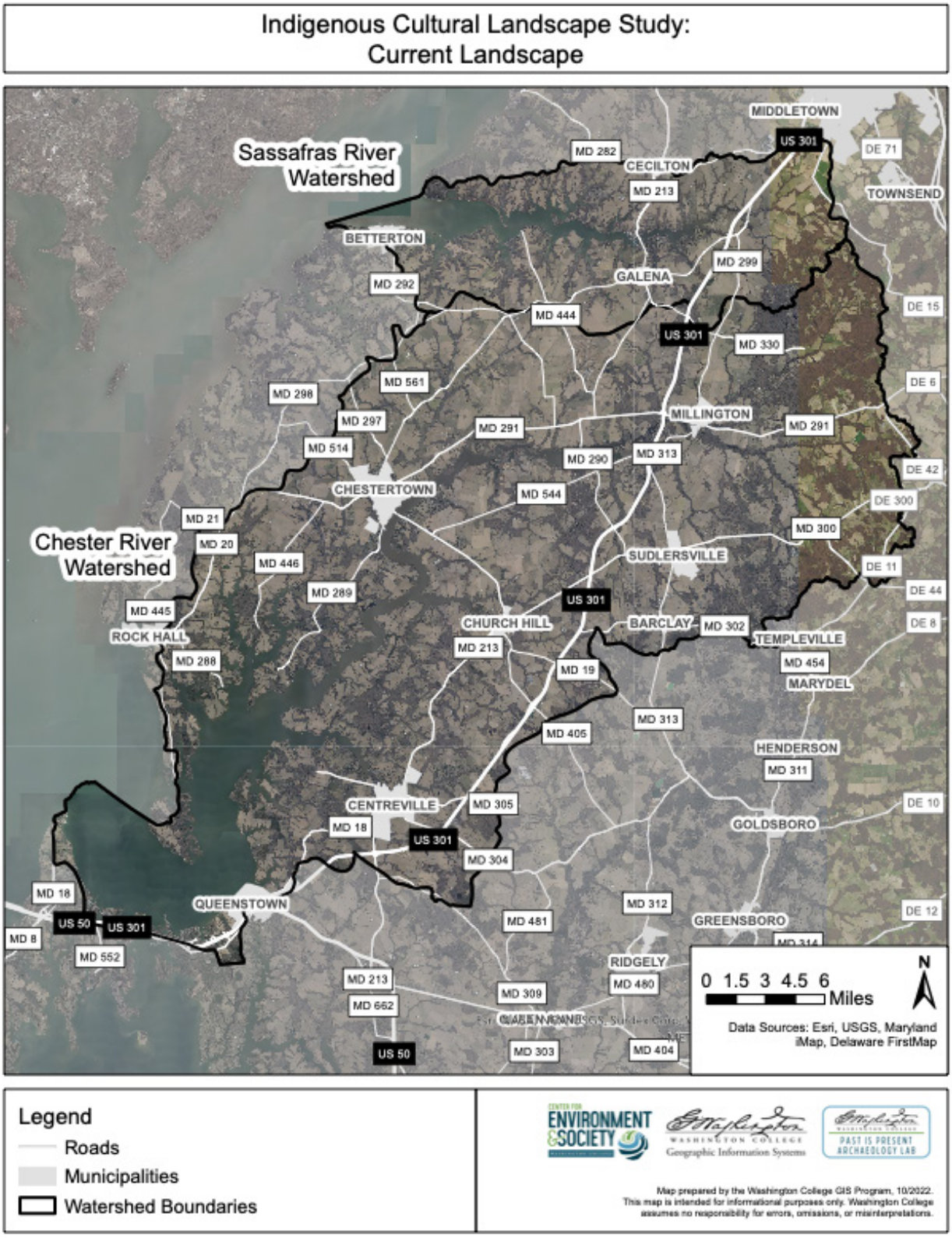


Figure 1.3: Aerial Imagery of the Project Area

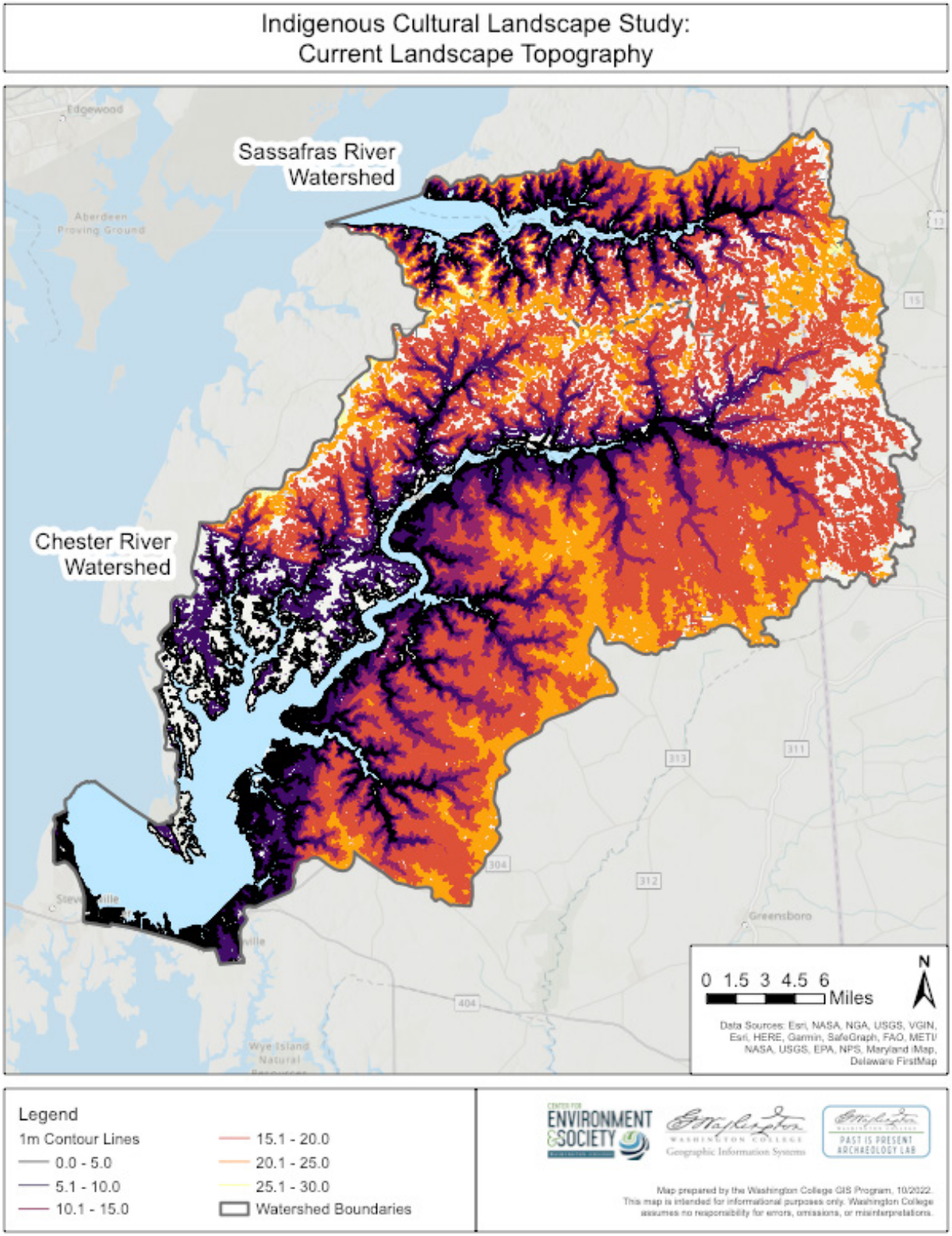


Figure 1.4: Topography in the Project Area

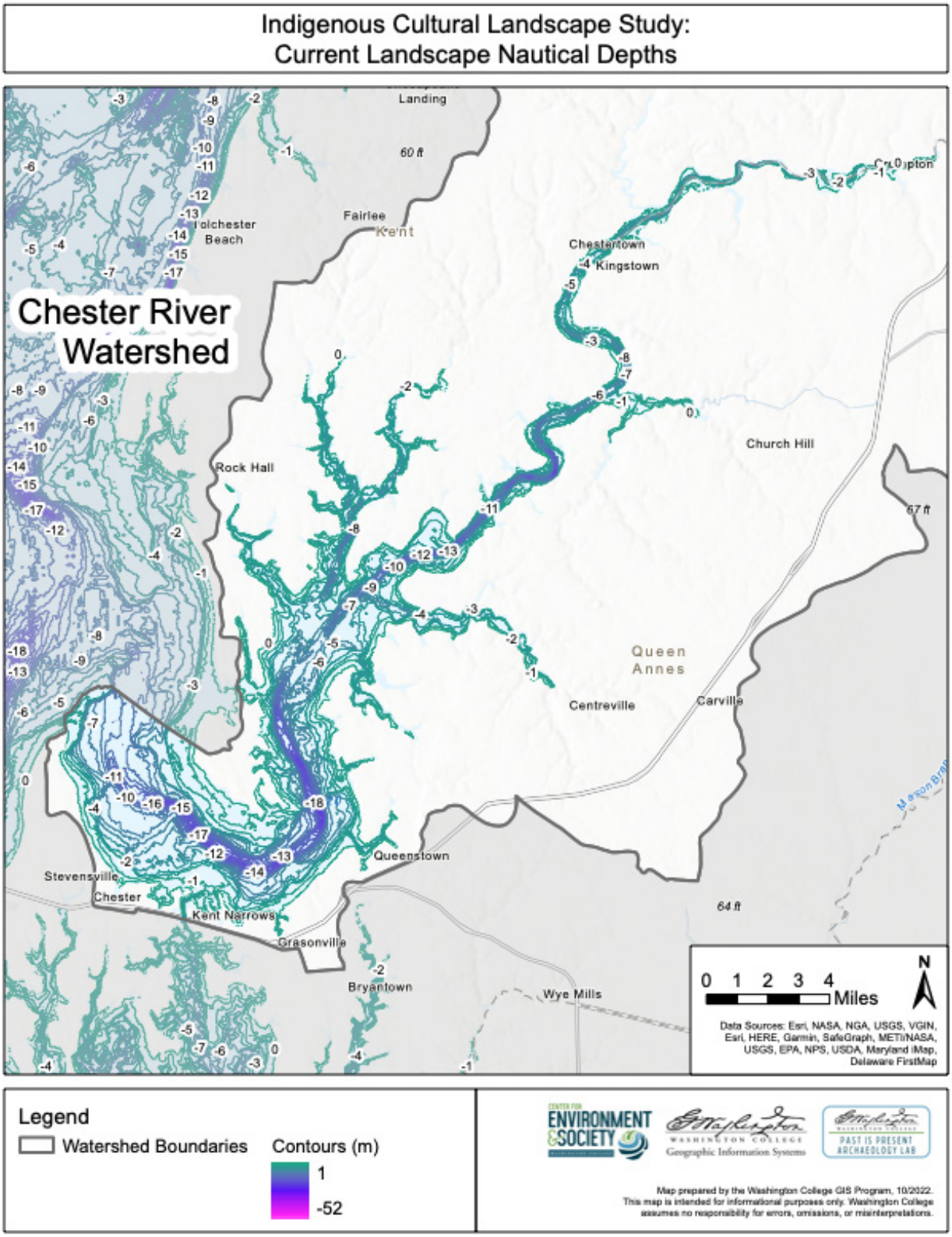


Figure 1.5: Water depths in the Chester River

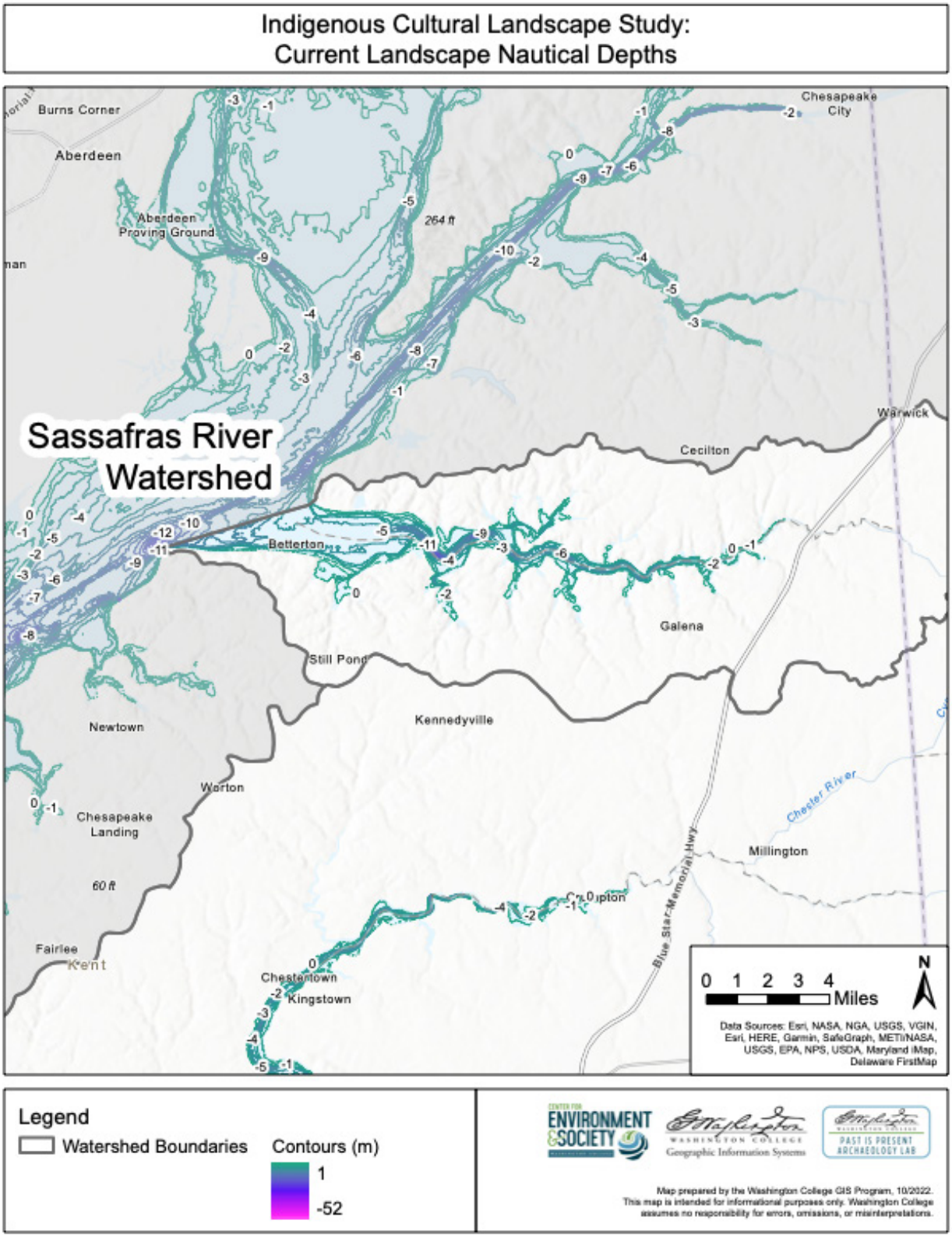


Figure 1.6: Water depths in the Sassafras River

CHAPTER 2
ENVIRONMENTAL OVERVIEW

The environment is in many ways the underpinning of any culture, and understanding the environment within which a people live is essential in understanding their way of life. To recognize this is not necessarily to adopt a cultural ecology approach, but simply to recognize an important set of constraints and opportunities that face any society. This study therefore starts with an environmental overview, before considering culture, history, ethnography, and archaeology.

Estuaries, a complex mix of fresh and salt water, are highly productive environmental zones, with their waters supporting a wide range of life, from indigenous species of aquatic organisms to prolific fringing marshes and shoreline. The Chesapeake Bay is the largest estuary in the United States, with a watershed of 64,000 square miles and myriad tributaries and shoreline areas. These supported a range of resources that were useful to Native peoples (Figure 2.1). On the upper portion of the Chesapeake, on its eastern side, two of the major tributaries are the Chester and Sassafras Rivers, the focus of this study. Although there are many similarities between the Chester and Sassafras Rivers and their watersheds, we will look at each separately, beginning with the Chester.

The Chester River

The Chester River (Figure 1.5) and its tributaries served as a transportation route for both American Indians and colonists, but it also was a source of food and other resources for both groups due to its biological productivity. The river retains many of the natural characteristics it had in the early 17th century, thanks in part to an unusually large percentage of land in conservation easements or other forms of protection. Although water quality is impaired, oysters have been depleted, and many of the large animal species prevalent during that period have disappeared – especially large predators – the same may be said of all of the rivers of the Chesapeake. Despite these shortcomings, however, to outward appearances much of the river can appear little changed to visitors and it retains an impressive set of natural resources.

In establishing the historic character of the river, early writers give us a good sense of both the landscape and the flora and fauna, beginning with John Smith himself. Smith's most detailed descriptions of the landscape are probably found in his *Map of Virginia* (Smith 1986b), augmented with site-specific information in the different accounts he left of his travels. In the Bay and its rivers, Smith spoke of "many Isles both great and small, some woody, some plaine, most of them low and not inhabited" (Smith 1986b:144). This certainly characterizes today's Eastern Neck Island at the mouth of the Chester, now a 2,285-acre national wildlife refuge. He noted that the land was "not mountainous nor yet low but such pleasant plaine hills and fertle valleys, one prettily crossing an other, and watered conveniently with their sweete brookes...By the rivers are many plaine marishes containing some 20 some 100 some 200 Acres, some more,

some lesse…" (Smith 1986b:145), and this is a good description of much of the Chester River today.

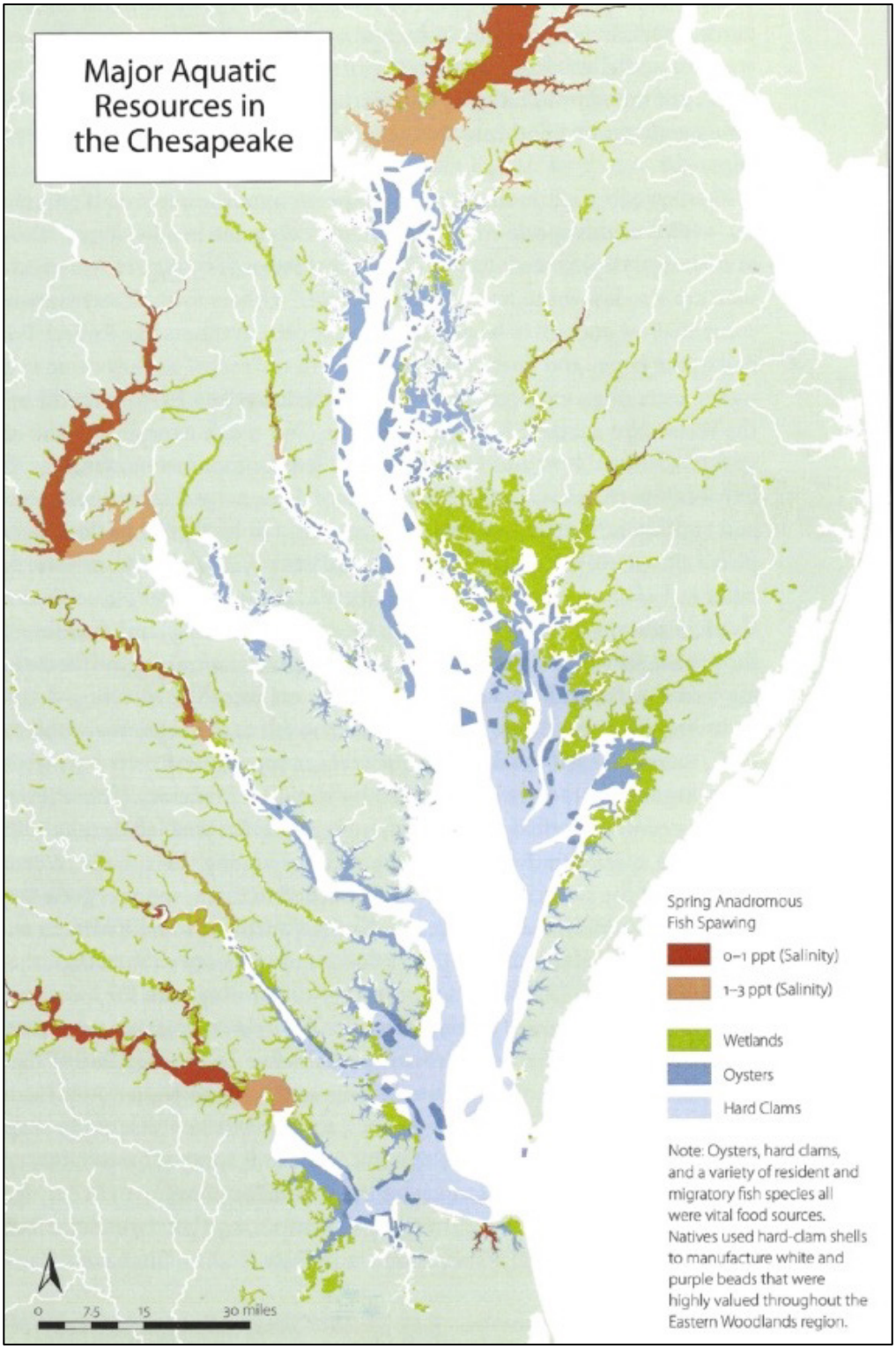


Figure 2.1. Major aquatic resources on the Chesapeake Bay (from Rountree *et al*. 2007:12)

Smith's treatment of forests mirrors the description given above, along with insights on their use by Native peoples. He lists berries of various types and gives a wonderful description of the native use of arrow arum: "called *Tockawhoughe*, It groweth like a flagge in low muddy freshes" (Smith 1986b:153). He recounts a range of game and other animals, including deer, bear, opossum, muskrat, beaver, and "a small beast they have, they call *Assapanick* but we call them flying squirrels, because spreading their legs, and so stretching the largeness of their skins they have bin seene to fly 30 or 40 yards" (Smith 1986b:154-155). Smith's vivid descriptions provide wonderful material for recalling the past productivity of the land inhabited by Native Americans.

John Smith was not the only Englishman to write of the country's landscape, he was just the first and perhaps most prolific during the early period. Father Andrew White accompanied the Calverts to Maryland in 1634, and he described some of the prairie grasslands that, along with pine savannah, were an important characteristic of the Delmarva: "On the plains and in open fields there is a great abundance of grass; but the country is, for the most part, thickly wooded. There are a great many hickory trees, and the oaks are so straight and tall, that beams, sixty feet long and one half feet wide can be made of them… There are alder, ash, and chestnut trees…The woods moreover are passable, not filled with thorns or undergrowth…" (White 1899). To these accounts may be added later works such as Alsop's *Character of the Province of Maryland* (1902 [1666]), other writers, and landscape details from journals, letters and deed descriptions. All of these lines of evidence work toward filling in our understanding of the natural landscape of the early 17th century and establishing a baseline for an ICL.

Much of what these early observers wrote about remains in the landscape today, and the Chester retains an impressive diversity of resource**s**. Along its 43-mile (69 km) length, it spans several major regime changes, based in large part on water salinity. The hydrologic cycle, the complexity and diversity of estuarine systems, and the specifics of the Chesapeake estuary as a system are comprehensively treated in a variety of places, and this report will not attempt to replicate that, but rather highlight some of the important assets or characteristics of the Chester River.

Beginning at the mouth of the river, the water is highest in salinity (Figures 2.1 and 2.2). Depending upon the season, rainfall, and other factors, the water of the Chester can be salty-brackish or oligohaline (brackish-fresh), up to just above Chestertown. It tends to be oligohaline to just above Crumpton, and freshwater beyond. The river historically supported blue crabs, American oysters, hard clams (quahog), and soft clams (manninose). Fish include American eel, American shad, alewife, blueback herring, Atlantic silverside, winter flounder, hogchokers, weakfish, and bay anchovy. Herring and shad spawning areas typically are located in the upper, freshwater portions of rivers, while hogchoker and bay anchovies spawn in the middle reaches and have nurseries in the upper freshwater zones. Both juvenile and adult bluefish frequent the river, with widely varying distributions from year to year. Striped bass (rockfish) spawn in parts of the Chester. Yellow perch, brown bullhead, channel catfish and white catfish concentrate in the upper reaches (Lippson 1973:32,38; Rountree and Davidson 1997).

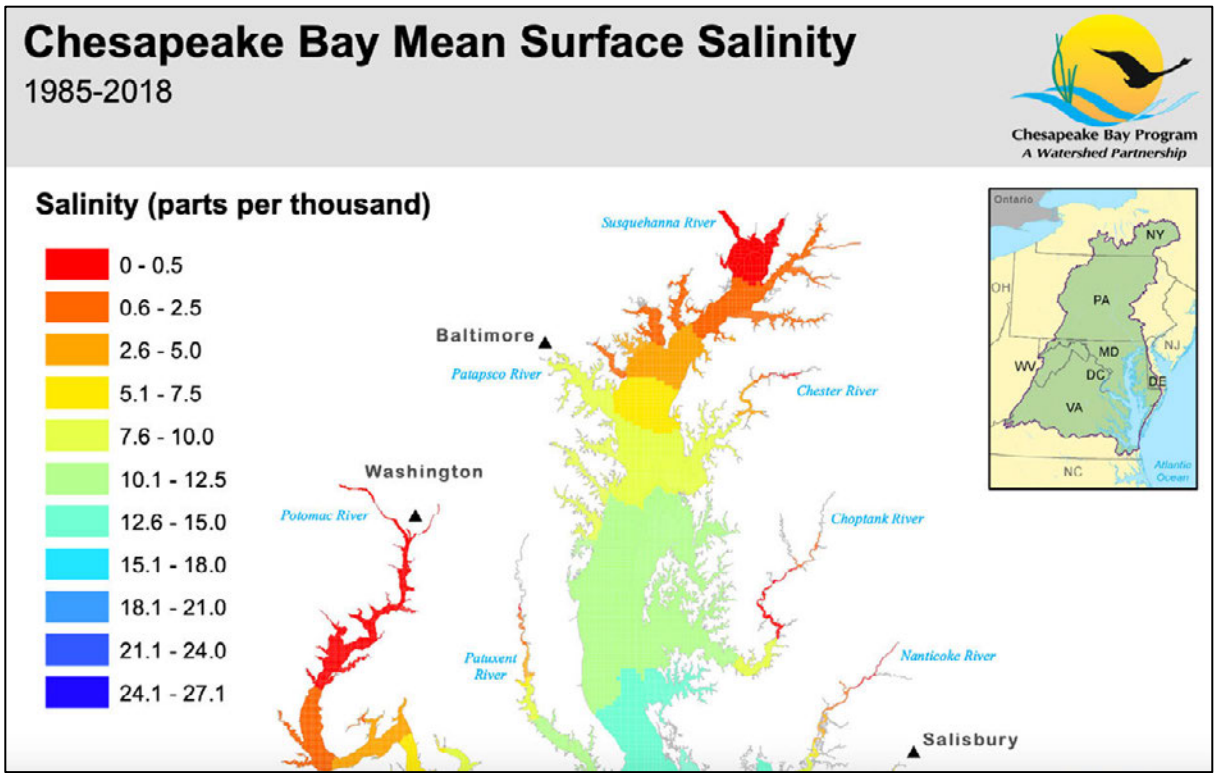


Figure 2.2: Mean salinities, 1985-2018
(https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/salinity_surface.pdf)

Oysters (Crassostrea virginica) are an important element of the estuarine system and were extensively utilized by Native peoples. Oysters are tolerant of a range of growing conditions and are widely spread up and down the east coast of North America and into the Gulf of Mexico. Nonetheless, they do have certain requirements, including salinity in the range of 5-42 PSU (or ppt), and can tolerate brief exposures to salinities as low as 2 PSU (Shumway 1996). It is almost certain that salinities today are lower than during the Late Woodland and early historic period, due to the vast increase in impervious surfaces and reduction in forest, which greatly increases freshwater runoff into the tributaries of the Chesapeake, including the Chester and Sassafras Rivers. The presence of oyster beds up as far as the Susquehanna (Brooks 1891) argues for their presence farther up both the Chester and Sassafras Rivers during prehistoric times.

From the standpoint of Native Americans, fresh-brackish oligohaline waters and freshwater reaches that correspond with Matapeake and Sassafras loamy soils were particularly attractive (and soil and water type tended to correlate). In the spring, these areas provided spawning grounds for anadromous fish such as shad, herring, alewife, sturgeon, spot, croaker (hardheads) and white perch. They also support a range of important, edible plants, such as arrow arum (Tuckahoe), wild rice, duck potato and more (Rountree and Davidson 1997).

The forest cover of the region during the Contact Period was predominantly hardwood and mixed deciduous forest. Oak-hickory was wide-spread in the upper portions of the Chester, with some areas that were predominantly oak-gum. Oak-hickory forests are particularly productive from the human standpoint, having abundant mast. This in turn attracts preferred game species such as turkey and white-tailed deer. Along freshwater streams, trees and shrubs**,** such as birch, alder, red maple, beech, oak, witch hazel, cherry, willow and service berry**,** historically attracted large beaver populations, which may still be seen on some of the Chester's streams (Rountree and Davidson 1997: 9-12). Forest cover is reduced from its prehistoric and early historic period highs, but has rebounded somewhat beyond its low during the 19th and early 20th centuries. Unfortunately, no good estimates of the changes in salinity over time are available, and this impacts our ability to say with certainty how far up the Bay and the tributaries oysters extended. Today, the upper limit of oysters in the Chester is at Quaker Neck Landing, while historic beds in the Chesapeake Bay proper extend only as far north as Poole's Island. It is likely that oyster beds extended farther upstream during the Woodland, and we will see evidence of this below in the distribution of shell middens in the project area. Soft clams also were utilized by Native peoples, and their modern distribution is somewhat more restricted than oysters, surviving only in the lowest stretches of the Chester and about halfway from the mouth of the Chester to the Sassafras.

The Chester's position on the Atlantic flyway brings seasonal waterfowl such as Canada geese and duck. Other species, some year-round and some seasonal, include osprey, bald eagle, kestrel, kingfisher, a variety of herons, bobwhite quail, gray squirrel, raccoon, and rabbit. Otters were (and are) present on some tributaries of the Chester, along with the endangered Delmarva fox squirrel. Introduced species today include red fox and bluebirds, as well as a variety of non-native plants – of the latter, the most visible along the river is *Phragmites australis,* which is especially prolific in disturbed areas. Unlike many native plants, this species does not provide food for waterfowl. Delmarva bay-basins, elliptical sand ridges sometimes called Carolina Bays, historically extended down along the Chester, although most have now been obliterated by plowing. Where they remain, these seasonal wetlands serve as an important breeding ground and nursery for many amphibians, including the rare Eastern Tiger Salamander (Eastern Shore Heritage 2004: 53). All of the native species listed above were present during Smith's time and remain today.

The variety of native plants in the project area is extensive and beyond the scope of this report. The best synopsis of native plants and their use by Native American on the Eastern Shore is in Rountreee & Davidson (1997:Appendix C). In her appendix, Rountree organizes plants by ecological zone, use, and season, making it particularly helpful and easy to use. She offers a similar listing of shellfish and fish in Appendix D of that work.

The Sassafras River

The Sassafras River is about half the length of the Chester, at 22 miles (35 km). Its origin is southwest of Middletown, Delaware, and it forms the boundary between the Maryland counties of Cecil and Kent. Much of the above discussion of the Chester River applies equally to

the Sassafras. Two major differences, however, are topography and the salinity of the river. The terrain is higher than that along the Chester, with bluffs rising 60-80 ft (18-24 m) above the shoreline. The water is markedly less saline than the Chester, at roughly 0.6-2.5 PSU (ppt), which has consequences for aquatic species.

The following overview relies upon a relatively recent characterization of the Sassafras River watershed compiled by the Sassafras River Association (2009, Appendix F) in support of a watershed action plan. It cited data from the Maryland Department of Natural Resources (DNR) that records four different types of anadromous fish species as spawning in the tidal streams of the Sassafras watershed: Alosid, White Perch, Yellow Perch and Striped Bass. In the watershed's nontidal waters, fish include Eastern Mudminnow, Bluegill, Largemouth Bass, American Eel, Creek Chubsucker, Golden Shiner, Creek Chub, Eastern Mosquitofish, Brown Bullhead, Pumpkinseed, Tesselated Darter, Least Brook Lamprey, Redfin Pickerel, and Green Sunfish. No oysters are found in river today, and historically the closest known oyster beds were in the main stem of the Bay around Pooles Island and just above Kent County's Fairlee Creek, roughly 8 miles (13 km) below the mouth of the Sassafras (Maryland Shell Fish Commission 1909). However, our examination of site files at the Maryland Historic Trust shows that there are recorded archaeological sites with oyster middens farther north, including at the mouth of the Sassafras (18KE33, Cole's Howell Point Farm 1) and up the river on Turners Creek (18KE199). As noted previously, it is likely that salinities were higher in earlier times and that the distribution of natural oyster beds extended farther up the Bay.

Approximately 57% of the land use currently is agriculture, with roughly 25% of the landscape forested, and 4% developed for residential or commercial purposes. DNR has mapped wetlands that totaled 4,026 acres in 2009. Of these, 897 acres were estuarine wetlands, 2,907 acres were palustrine wetlands, and 222 acres were lacustrine wetlands. The Sassafras Watershed Acton Plan (Sassafras River Association 2009, Appendix F) noted that 276 acres were "wetlands of special state concern," with an estimated wetlands loss of 11,651 acres. This suggests that there were 16,000 acres or more of wetlands during prehistoric periods, offering a multitude of opportunities for foraging and hunting to Native peoples.

Forests in the Kent County portion of the Sassafras watershed include mixed oak/American Beech/Tulip Poplar, with non-native Paulownia in some deep ravines. Some areas have been planted with Loblolly pine, along with some strips of White Pine. There are some areas along the river with sweet gum and red maple, but their distribution markedly increases upstream, toward Massey. Fallow fields show successional regrowth with species such as Virginia pine, black locust, black cherry, sweet gum and red maple. The distribution of oak trees depends upon on soil types, with white oak, northern red oak, black oak, and chestnut oak found on rockier and steeper ravine areas, while wet tolerant swamp white oak, swamp chestnut oak, willow oak and pin oak are found in more hydric soils.

Underlying the vegetation are soils that obviously influence species distribution. The Watershed Acton Plan characterizes the soils as follows (Sassafras River Association 2009, Appendix F:49):

> Soil survey maps (National Cooperative Soil Survey SSURGO data) provide the location and distribution of soil types that are important in watershed and land use planning... The soils in the Sassafras River watershed have formed in unconsolidated sediments of the Coastal Plain. In general there are sandy and gravelly layers deep under the surface, with varying layers of silts on the surface that were brought in with the wind over the Chesapeake Bay and river beds, when water levels were much lower. A few areas have layers of heavier clay materials that were deposited under shallow or still water. Very few rocks are found near the surface of the soil, and depth to bedrock is very deep. With the temperate, humid climate, and level to gently sloping topography, the soils are extremely productive for agriculture and forestry.

Based on archaeological surveys conducted by the author along the Sassafras, there has been an extensive loss of topsoils in the historic period, due to erosion and deflation. Reddish, heavily oxidized and gravelly soils of great age are visible in many fields due to unsound agricultural practices of earlier years (Seidel and Lowery 2008; Seidel and Schindler 2012).

CHAPTER 3
HISTORICAL OVERVIEW

This section draws heavily on the work done by the Principal Investigator of this project for the Maryland Humanities Council (2001), as well as a variety of reports prepared through the work of the Washington College Center for Environment & Society's Past Is Present Archaeology Laboratory (Seidel 2005, 2009, 2010; Seidel *et al*. 2007; Seidel and Lowery 2008; Seidel & Schindler 2012). The region was attractive for Native American use and settlement from the first human habitation, although climate changed remarkably since the first arrival of humans in the area, with consequent changes in vegetation and hydrology. Predictive modeling for archaeological resources in the region, taking into account these changing variables, shows that extensive portions of the region had a high probability for Native American sites over multiple time periods (Seidel *et al*. 2007).

Archaeologists have divided North America's prehistory into various periods or phases, each characterized by specific cultural complexes that changed over time. The chronology and descriptions here are taken from the lead author's work for the Maryland Humanities Council analysis of regional chronologies (Maryland Humanities Council 2001).

The three major periods are: the Paleoindian period (12000-8000 BC); the Archaic period, which is subdivided into the Early Archaic (8000-6500 BC), Middle Archaic (6500-3000 BC), and Late Archaic (3000-1000 BC); and the Woodland period, which is subdivided into the Early Woodland (1000 BC-200 AD), Middle Woodland (200-900 AD), and Late Woodland (900-1600AD). The period of initial interaction between Native Americans and European explorers and settlers is referred to as the Contact Period (1600-1650 AD in this area).

Paleoindian and Early Archaic Periods

The Paleoindian and Early Archaic Periods (12000 BC – 6500 BC) were a time of significant environmental changes that accompanied the end of the last ice age. The earliest period was characterized by much colder temperatures, significantly lower sea levels (the Chesapeake Bay did not exist), and a very different ecology, with life adapted to the cold. Human cultural strategies were shaped to effectively deal with this specific environment. No Paleoindian sites have been excavated in the lower Susquehanna area, although shoreline finds of characteristic lithic artifacts have been found. People at this time seem to have been highly mobile, shifting their location to take advantage of seasonally available plant resources and small game. Riverine environments such as the project area were important, as they attracted a wide variety of game and supported more diverse plant communities. Furthermore, the nearby fall line was the dividing line between two separate physiographic provinces, the coastal plain and the piedmont. The boundary between the different ecosystems in these provinces is known as an "ecotone," and ecologists have long recognized ecotones as areas of wide diversity and a relative abundance of flora and fauna.

Global temperature began to warm toward the end of the Paleoindian Period and into the Early Archaic, with a consequent rise in sea level and shifts in plant and animal communities. These changes were not yet significant enough to require major adjustments in human subsistence or settlement strategies, although many of the stone tools made and used began to change in form and material.

Middle Archaic

During the Middle Archaic (6500 BC-3000 BC), the climate continued to moderate, eventually reaching modern conditions. Shifts toward deciduous trees from the earlier pine and spruce, along with a spread of grasslands attracted browsers, grazing animals, and species adapted to denser forests (deer, elk, turkey). Lithic tool styles changed, probably due in part to different hunting strategies, as well as different ways of attaching points to shafts. It is likely that people expanded their reliance upon foraging, taking advantage of the relative abundance of resources compared to earlier periods. This was particularly true of riverine and swampy locales at the margins of rising tributaries. A consequence may have been reduced mobility.

Late Archaic

The Late Archaic (3000 BC-1000 BC) may be seen as both an intensification and culmination of developments seen in the earlier Archaic periods. The number and types of ground stone tools expanded, and a wider variety of flaked tools, from new stone sources, are seen. Highly decorated bone tools, such as awls, fish hooks, and harpoons were made, along with stone net sinkers that all point toward an increasing reliance upon fishing. Fish traps and weirs, some of them quite elaborate, were placed along the area's rivers. In a pattern that would remain entrenched well into the historic period, people exploited seasonal runs of spawning fish. Fish could be dried for storage, oysters were harvested and smoked, and a wide variety of other foods such as nuts and cereal grains could be stored, relieving the scarcity of the winter months. This in turn would lead to population growth.

Also worth noting is an apparent increase in long-distance trade over this period. This is seen in stone sources (rhyolite from the west; argillite from what is now Delaware, Pennsylvania, and New Jersey; and copper). The Susquehanna River, with its long reach inland and to the north, emerged as an important trade corridor.

Early Woodland

By the end of this period, sea levels approximated their current level and the Chesapeake Bay finally reached its modern extent. It is no coincidence that this is paralleled by a major shift in human strategies, recognized by archaeologists as the Early Woodland (1000 BC – 200 AD). Perhaps the most significant of these changes was the introduction of ceramics. A variety of types, with different constituents and tempering additives, as well as different forms,

emerged. The most prevalent example from the northern Delmarva was Wolfe Creek ware, in which crushed quartz was used as a temper and the surface was decorated by pressing cord or nets into the clay before it was fired.

Pottery as a technology had a profound effect on people, increasing both life expectancy and birth rates, with a consequent rise in populations. Food could be softened over the fire in a clay pot for hours, making it more edible for both older people with bad teeth and infants who were being weaned, while stews retained more of their nutrients in this method of cooking. Although the wide-spread reliance upon maize is thought of as a Late Woodland phenomenon, it is worth noting that by about 100 AD it was taking root in the subsistence of some southern Chesapeake groups such as the Chickahominy (Gallivan 2016: 139) and may have been present elsewhere in the region.

Early Woodland Indians ate crabs and shellfish from the Chesapeake Bay. The present distribution of oyster beds is far south of the Havre de Grace area, but evidence suggests that they were plentiful in the uppermost Bay in earlier times. One researcher recorded close to 15 million square yards of "Susquehanna River Oyster-Beds" in 1883, along with large expanses in the Sassafras, Back, Gunpowder, and Bush Rivers (Brooks 1891). Current salinity levels at the mouth of the Susquehanna River are too low to support oysters, suggesting a change of some magnitude in that variable. No research on the subject is readily available, but it seems likely that the less disturbed forest ecosystems of the prehistoric period prevented freshwater run-off and resulted in higher salinity levels than those of today. At times, the salinity periodically may have been even higher. Willard *et al*. (2003) report on their sediment core research in the Chesapeake Bay revealing periods of sustained *Pinus* pollen abundance, which is in turn linked to dry periods, or sustained droughts. In the recent past, these include the periods from 1300-1420 AD and 1525-1650 AD. These conditions would have reduced rainfall and freshwater run-off even more, resulting in higher salinity throughout the Bay. Tibert *et al*. (2012) used cores to explicitly examine seasonal salinity from an historical perspective. Microfossil paleoecology and oxygen isotope analysis revealed a clear shift toward a gradual freshening of Bay water and a deterioration of the salinity structure in the tidal estuaries during the mid- to late 19th century. They attributed that to both changes in land use (greater clearing and shifting agriculture) and climate trends. The earlier drought periods, when extensive (such as the two periods noted above that exceeded a century), would have presented an opportunity for a slow upstream spread of oysters.

Middle Woodland

Many of these trends continued during the Middle Woodland (200 AD-900 AD), including the expansion of trade networks. People seem to have clustered in larger groups along waterways, with seasonal inland camps that were smaller. The range of plants used seems to have expanded, along with intentional, preferential treatment of some species (a trend that may have first appeared in the Early Woodland). Skeletal and isotopic analysis of period burials from Delaware's Island Field site suggest an increasingly carbohydrate-rich diet,

likely due to an expanded use of plants such as goosefoot, amaranth (an annual herb that produces edible seeds), and perhaps wild rice.

Late Woodland

A number of technological shifts distinguish the Late Woodland (900 AD– 1600 AD). This includes more sophisticated and durable ceramics, with shell-tempering. A shift to small, triangular stone points also points to the adoption of the bow and arrow at around 900 AD. This was a more effective hunting tool, also useful in hunting the waterfowl that were abundant in the Chesapeake, but especially in the Susquehanna Flats at the head of the Bay. In addition, people in the region began to truly adopt domesticated plants such as squash, beans, and maize. This made flat river bottoms more attractive for settlement, as they were more easily cultivated, but higher ground with appropriate soils also were sought after. With the population shift into the floodplains came a coalescence of people into larger villages, a phenomenon that appears in the southern Chesapeake by at least 1300 AD (Gallivan 2016:139).

By about 1500 AD, many Native peoples in the region made the shift from tribal groups to what are more accurately called chiefdoms. These were more centralized societies, with internal ranks and "redistributive economies," in that some of what people produced was collected as tribute by more powerful figures. For the Chesapeake, perhaps the best known of these chiefdoms are those of the Powhatan, centered on the James River; the Piscataway, along the Potomac; and the Nanticoke on the southern part of the Eastern Shore. But there were other such groups in the upper Chesapeake, albeit smaller in population, and new groups moving in from outside.

Contact Period

This brings us to the Contact Period (1600 AD-1650 AD). One of these outside groups was the Susquehannock, an Iroquoian group, as opposed to the indigenous Algonquians. They first emerged as a recognizable group around 1500 AD farther north up the Susquehanna River in what is now Bradford County, Pennsylvania. By 1575, they appear to have controlled an area centered around present-day Lancaster County, but their presence can even be seen in the upper Potomac Valley in the mid-1500s (Kent 1989). They appear to have co-habited with the indigenous Shenks Ferry people. Cadzow (1936) found evidence of both cultures in features at Shenks Ferry Site, where limited trade items were found and included cut brass and a spiral brass ear ring, suggestive of the period 1550-1575. Nevertheless, there is evidence of violent contact between Susquehannock and Shenks Ferry people, highlighting the dynamic situations that emerged with these population movements.

At the time of John Smith's exploration of the upper Chesapeake (see below), the Susquehannock's principal village seems to have been in or near present day Washington Boro, in Pennsylvania. Its geographical location coincides neatly with the position of the place marked *Susquesahanough* on Smith's map (Figure 3.1).

Figure 3.1. John Smith: "A Map of Virginia" (1612) – upper Bay shown in red box (see Figure 3.2 for detail).

The Susquehannock probably reached their peak population in about 1650, numbering 3,000, after which they declined due to conflict with both other Indian groups and European settlers. Kent (1989) feels that availability or better access to trade goods may have been a major reason for the Susquehannock movement into the lower Susquehanna Valley, and the Susquehannock denial of trade goods to other native peoples (or competition) may have been the primary cause for conflicts which are implied by the archaeological record. During the first half of the 17th century, however, they were expanding their influence down the Susquehanna and into the upper Chesapeake, as well as to the east into Delaware and even lower New Jersey, through raids (de Vries 1655).

Captain John Smith led two expeditions into the upper Chesapeake in 1608 and 1609, exploring out of Jamestown, the first successful English colony in North America. His prolific writings and map of the Chesapeake leave us with some of our best, early accounts of the peoples he encountered. For this area, he said (Smith 1986a, Volume 1:148-1650):

> At the end of the Bay where it is 6 or 7 miles in breadth, there fall into it 4 small rivers, 3 of them issuing from divers boggs ringed with high mountaines. There is one [the Susquehanna] that commeth du north 3 or 4 daies journy from the head of the bay and fals from rocks and mountaines, upon this river inhabit a people called Sasquesahanock." They are seated 2 daies higher then was passage from the discoverers barge. . . .
>
> …60 of those Sasquesahanocks, came to the discoverers with skins, Bowes, Arrowes, Targets [shields], Beads, Swords, and Tobacco pipes for presents. Such great and well proportioned men, are seldome seene, for they seemed like Giants to the English, yea and to the neighbours, yet seemed of an honest and simple disposition, with much adoe restrained from adoring the discoverers as Gods. Those are the most strange people of all those Countries, both in language and attire; for their language it may well beseeme their proportions, sounding from them, as it were a great voice in a vault, or cave, as an Eccho. Their attire is the skinnes of Beares, and Woolves, some have Cassacks made of Beares heads and skinnes that a mans necke goes through the skinnes neck, and the ears of the beare fastned to his shoulders behind, the nose and teeth hanging downe his breast, and at the end of the nose hung a Beares Pawe....One had the head of a Woolfe hanging in a chain for a Jewell, his Tobacco pipe 3 quarters of a yard long, prettily carved with a Bird, a Beare, a Deare, or some devise at the great end, sufficient to beat out the braines of a man, with bowes, and arrowes, and clubs sutable to their greatnesse and conditions...They can make neere 600 able and mighty men and are pallisadoed in their Townes to defend them from the Massawomekes thier mortall enimies.

These villages were palisaded for defense, a tactic adopted by others in the region, such as the Tockwogh on the Sassafras River. The need for defense can be seen in Smith's comments on the Massawomeks, the "mortall enimies" of both the Susquehannock and the Tockwogh. This Iroquoian group, another set of relative new-comers, was located farther to the west and raided into the region around the project area with frequency (Pendergast 1991). In short, the area and its peoples were anything but static and unchanging. Instead, this was a period of movement, expanding trade, and geopolitical jockeying for land, access to trade goods, and a better position. The flow of goods moved in all directions, including beads and maritime resources from the coastline, stone and other materials from well inland, and European goods such as the many "hatchets, knives, and peeces of yron, and brass," reportedly obtained from the Susquehannock, who no doubt obtained these materials from Europeans farther to the north (Smith Vol.1:231).

Continued and more sustained interaction between Native Americans of the region and the English came quickly. In 1631, William Claiborne headed north from Virginia and established a settlement on the Eastern Shore's Kent Island, followed by a

trading enterprise centered on Palmers Island in the Susquehanna River, near the head of the Bay.

John Fullwood, a 33-year-old interpreter, described how Claiborne obtained the valuable island:

> . . . in the month of Aprill or May Anno 1637, the said king of the Susquehannoes. . . did give to the said Claiborne the said Palmers Iland [and] the said king did cutt some trees upon the Iland, and did cause his people to cleare some ground for the said Claiborne to plant his corn upon that yeare, After which the said Claiborne did (by his servants) build houses and make a Fort for their better security upon the said Island. (Browne *et al*. 1883: 231-232)

Claiborne had first started using Palmers Island as a trading outpost as early as 1631-1633, and the fur-trading enterprise proved profitable, as beaver pelts became high-status items in England and Europe. Claiborne continued to conduct a large trading operation with the Indians, sometimes to the detriment of both the natural environment and the local tribes. By the early 1700s, several explorers noticed a significant drop in the beaver population in the bay and its tributaries. They also noted that in order to get muskets, knives, shirts, and alcohol, the local tribes had become less conservative and more ambitious in their hunting. Many tribes gave up farming and became hunters to meet the European demand for furs. As the supply of pelts in their area gave out due to over-hunting or trapping, they expanded their activity into areas occupied by other groups. Elsewhere, indigenous groups were pressed hard by English and Dutch settlers, who forced them to move out of their territories. As a result, Native American groups were on the move and territorial boundaries were constantly shifting, over quite large areas. Larger groups or coalitions were more successful in this pattern of shifting populations, disrupting smaller groups who could not withstand their pressure. This will become an important factor in assessing the changing nature of the indigenous landscape in our project area.

While Claiborne was expanding his trade empire, Cecilius Calvert, the second Lord Baltimore, and his followers established the Maryland colony on the banks of the Potomac River in 1634. As the Maryland settlers expanded their holdings, they became embroiled in a land dispute with Claiborne and his followers. Unwilling to abandon his gains, Claiborne appealed to the English crown, but in 1638 the British Committee of Trade and Plantations ruled in favor of Lord Baltimore and granted him unchallenged proprietorship of the colony.

By 1638 Palmers Island therefore had fallen to Lord Baltimore, who was enforcing his jurisdiction over the entire northern portion of the Chesapeake, including Kent Island. During subsequent hostilities with the Susquehannock in 1643, Palmers Island was again fortified ("ffort Conquest") and garrisoned. The uneasy relationship with the Susquehannock continued until 1652, when a treaty was signed, ending the conflict. The island was returned to Claiborne at this point, but the fur trade had by this time died out.

Smith's voyages and his 1612 map of the Chesapeake offer our first comprehensive descriptions of the project area. Smith's voluminous writings have been conveniently drawn together by Philip Barbour (1986) in his three-volume compilation, and Smith's experiences in the upper Chesapeake Bay are described in several different works; they tend to follow his 1608 progress through the area both chronologically and geographically. In Smith's *Proceedings of the English Colonie in Virginia* (Smith 1986a:231-233), he indicates that he sailed up the western shore of the Chesapeake in late July of 1608. "The first night we anchored at Stingeray Ile, the nexte day we crossed Patawomecks River [the Potomac], and hasted for the river Bolus [Patapsco], wee went not much further before wee might perceive the Bay to devide in 2. heads…", after which he sailed to the eastern side, probably near the Elk and Sassafras Rivers (Smith 1986a:230). He related an encounter with the Massawomeck Indians at the head of the Bay, followed by a meeting with the Tockwogh Indians and later the Susquehannock. Smith entered what he called the "River of Tockwogh" and was escorted by the Tockwogh to their palisaded village.

Smith's descriptions of the village will be reviewed in detail later, but having spent some time with the Tockwogh, he eventually decided to head back south: "Thus having sought all the inlets and rivers worth noting, we returned to discover the river of Pawtuxunt [Patuxent]…" (Barbour 1986a:232). Smith makes no mention of stopping anywhere between the River Tockwogh and the Patuxent, and indeed he implies that there was not much to see. This leads us to the question of precisely where the River Tockwogh was, or rather the identity of its modern correlate. Is it the Chester River, the Sassafras River, or some other river? If not the Chester, then did Smith visit or map the Chester, or did he miss it entirely?

John Smith clearly depicts the River of Tockwogh ("Tockwogh flu") on his map of 1612, with a "King's House," presumably the palisaded village he visited, shown on the south side of that river (Figures 3.1 and 3.2). He also shows the location of a people he called the Ozinies, but whom he never visited. As will be seen in later sections of this study, the Ozinies were almost certainly the Wicomiss, with Ozinies perhaps being a place name. The location is shown without any great detail on Figure 3.2, simply because Smith did not actually meet them or even visit Kent Island or the Chester River.

Figure 3.2. Excerpt from Smith's 1612 map, with Tockwogh and Ozinies highlighted.

Smith (Figures 3.1 and 3.2) shows the "Tockwogh flu" as fairly far north in the Chesapeake. Certainly, it appears to be north of the Bolus River, which is presumably the present-day Patapsco, roughly due west of the Chester River. The Tockwogh River also appears to be part of a four-river network that includes the Susquehanna. The identity of the rivers mapped by Smith may be assessed by juxtaposing his map with a current chart of the Bay, as shown in Figure 3.3.

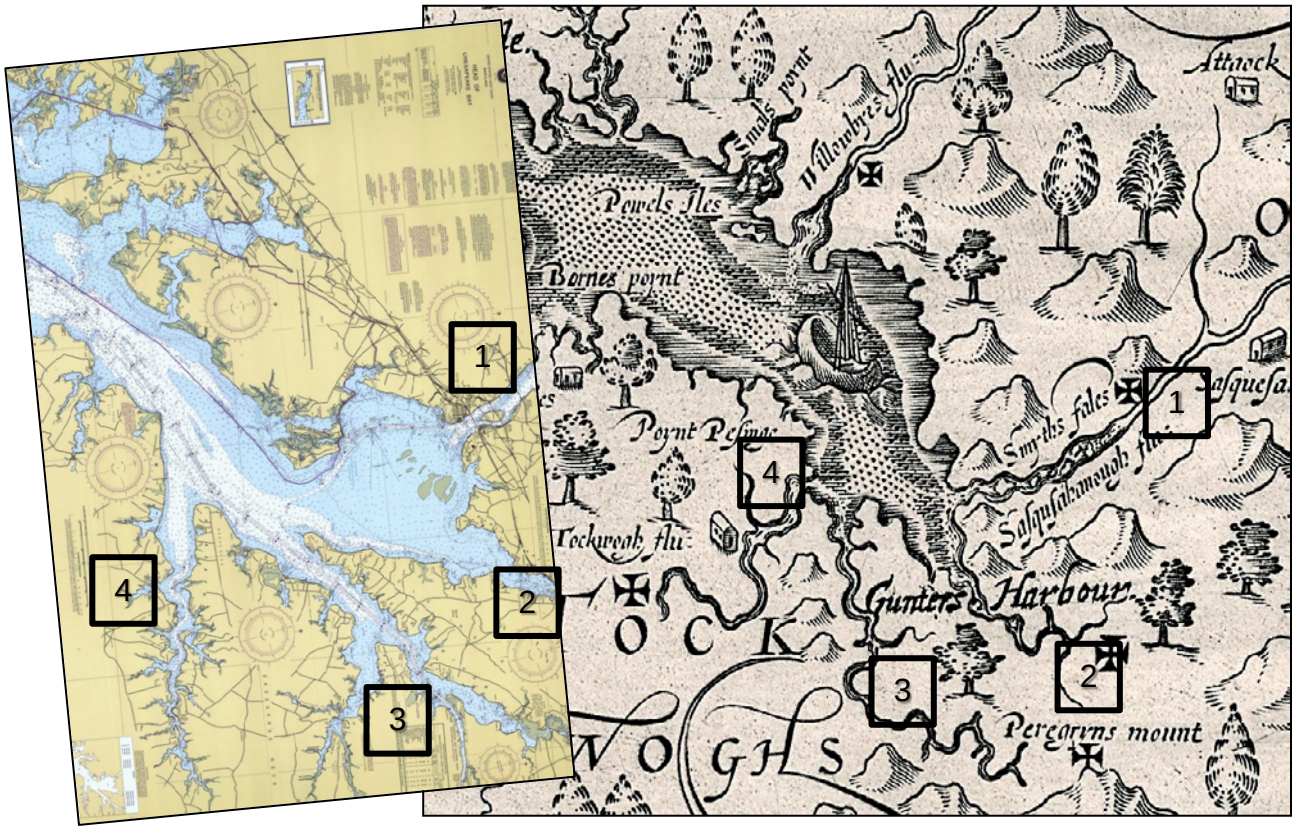


Figure 3.3. NOAA Chart 12774 "Head of Bay" (2000) on left, with Smith excerpt on the right; numbers correlate rivers between the two (see text).

In Figure 3.3, the rivers on Smith's map (right side) are numbered 1-4, with corresponding numbers placed on a modern chart of the head of the Bay (left side). River "1" is an easy match to make, with the Susquehanna being given the same name on both charts and providing a reliable starting point for map comparisons. River "2" must be the present-day Northeast River, while "3" is the Bohemia/Elk River system (with Smith showing the fork between the two). The logical correlation for the Tockwogh River then, is with the present-day Sassafras River. This comparison suggests that Smith visited the Sassafras River, not the Chester or another of the Eastern Shore tributaries, when he encountered the Tockwogh. Coupled with his narrative of leaving the Tockwogh and then heading directly to the Patuxent, the primary evidence argues against Smith having visited any of the Eastern Shore rivers immediately below the Sassafras, including the Chester River. In fact, on Smith's map the middle portion of the Eastern Shore shows much less detail than other portions of the Bay that we know Smith visited, thus supporting the conclusion that he did not visit this area.

Nevertheless, Smith clearly had some information about the area to the south of the Sassafras, presumably gleaned from the residents of Tockwogh during his visit. In Figure 3.2, for example, Smith depicts another "King's House" near "Bornes point" that he labeled "Ozinies." He must have known that there were additional rivers in the vicinity, as he shows

the mouths of two. Smith also shows the northernmost of several Eastern Shore islands ("Winston Iles"), which is most likely Kent Island. Following the above logic, "Bornes point" is probably Swan Point in present-day Kent County, placing Ozinies on or near the Chester River.

Smith's map provided the first chart of any accuracy for European explorers and colonizers. Widely copied, it was not improved upon until Augustine Hermann produced his more detailed map of Maryland for the Calverts in 1670. Smith's descriptions of the beautiful country at the head of the Bay, the welcoming inhabitants (the Tockwogh, at least, were welcoming, even if the Massawomeck kept their distance), and the presence of trade goods certainly must have intrigued other Englishmen, and the map served as both a guide and a magnet to the upper Bay. The trials of Jamestown, from its political squabbling and labor problems to the high mortality rates and massacre of 1622, kept the colony on its heels for some time, so it is not surprising that the promise of the upper Bay was not immediately exploited. As noted above, one of the first Englishmen to do so in a substantial way was William Claiborne. Claiborne was born in 1600 and arrived in Virginia in 1621 with the newly appointed governor, Sir Francis Wyatt (Torrence 1948:439-440). From his initial appointment as a surveyor, Claiborne was promoted to Secretary of State for the Colony, and from 1626-1629 he was given commissions to explore the northern Chesapeake and trade with the Susquehannock (Virginia Colonial Records Project reel 93:113-115). Perhaps in an attempt to forestall the Calverts, who had their eyes on the northern Chesapeake and soon would successfully obtain a charter, Claiborne obtained a trading commission and settled an outpost on Kent Island in 1631 (Browne 1883:161-162). This became the first English settlement in what is now Maryland, with a trading station at the mouth of the Susquehanna River (Klingelhofer n.d.).

The precise location of Claiborne's "Kent Fort" has never been reliably established. Pohuski (1991:6-7) believes it to have been on the south end of Kent Island, perhaps near Kent Point, outside of our project area. Although the Calverts moved quickly in 1634 to wrest Kent Island from Claiborne, his settlement near the mouth of the Chester River remained and became a nucleus for gradual expansion on the Eastern Shore. By 1638, the island was populous enough to become a "hundred" of St. Mary's County, with much of its population at the north end along the Chester, and by 1642 Kent County had been carved out of the Eastern Shore (Bourne 1998:18). Trade with American Indians flourished in these early years, so that by 1640 it is likely that all of the American Indian groups on the Eastern Shore had been contacted by the English (Rountree and Davidson 1997:88-89). Relationships between the various indigenous groups around the Chester and Sassafras Rivers are more fully discussed later in this report, but tensions hindered any large-scale settlement on the mainland portion of the Upper Eastern Shore until after the 1652 cessation of hostilities. By that time, however, Puritans had moved from Virginia up the western shore to the mouth of the Severn River, around present-day Annapolis and nearby Greenbury Point (1649). In the late 1650s, they and others began taking up patents along the Bay in what is now Kent County.

The process was fast and was not just in title, as by 1664 a ferry was established far up-river at the Head of Chester, today's Millington (Bourne 1998:20). As populations grew, new

counties were formed and boundaries shifted, as did county seats. In 1680, Kent County's seat moved from Kent Island to Eastern Neck's New Yarmouth, on Gray's Inn Creek, only to move up-river to Old Town (now Quaker Neck Landing) in 1695, and again up-river in 1706 to the site of what is now Chestertown. In less than a century after Smith and Claiborne showed the way, Kent and Queen Anne's Counties, on the north and south sides of the Chester River, respectively, as well as the land on either side of the Sassafras River, had been settled with plantations and the river teemed with commerce – but this came at the expense of the Native peoples who had first called it home.

No clear link or contact between John Smith and William Claiborne has been discovered. Nevertheless, as a surveyor and an ambitious man with eyes on the trade of the upper Chesapeake Bay, Claiborne would certainly have been familiar with Smith's descriptions of the land and its inhabitants, and he must have used Smith's map as he sought out the Susquehannock and their furs. Claiborne's settlement at Kent Fort was based on that knowledge, and his followers and those who were later welcomed to the area by the Calverts were the first English settlers along the Chester River. They were joined by Puritans from nearby Providence on the western shore, who must have likewise been familiar with Smith's work (it is worth noting that the Puritan settlers of Massachusetts were familiar with Smith's descriptions of New England and profited from his observations and advice). Although Smith did not visit the Chester River himself, he recorded its mouth and Kent Island, he learned of and wrote about the native inhabitants of the river (the Ozinies).

Farther north, despite Claiborne's trading activity and incursions into the upper Chesapeake from Dutch and Swedes in the neighboring Delaware Valley, real colonial settlement did not occur until after mid-century. The Susquehannock were still a force to be reckoned with up to that point, and while they sought trade, they resisted European attempts at settlement until 1652, when Nathaniel Utie settled a plantation on Spetsutie Island. At that point, the "Indian threat" seems to have largely faded (Seidel 2021). For the next 30 years, settlement was focused on the shorelines of the upper bay and its tributaries.

Aside from Palmers Island, the first settled plantations in what is now Cecil County came in 1658, on Carpenter's Point near the mouth of Principio Creek (east of the project area). This was followed by Augustine Herman's settlement of Bohemia Manor in 1661. The influx of people seeking wealth via the staple crop of tobacco reached a critical mass by 1674, at which point Cecil County was carved out of the eastern portion of Baltimore County and part of Kent County.

CHAPTER 4
TRAVELERS ACCOUNTS – DE VRIES, FOX, DANCKAERT, & HESSELIUS

Once English settlement took root, the visible traces of Native American presence gradually faded or were eradicated by agriculture and other changes in the landscape. But travelers through the area offer useful information on the landscape, albeit a landscape under transformation, as well as their encounters with Native peoples. Four of these were considered for this project, and they will be summarized in chronological order: de Vries (1655), George Fox (1672-1673), Jasper Danckaerts (1680-1683), and Andreas Hesselius (1711-1724).

David Pietersz de Vries (1631-1635)

In December of 1632, Dutch mariner and trader David Pietersz de Vries began several encounters with Native peoples along the Delaware River that shed light on the movement of people and geopolitical shifts underway in the larger region. A year earlier, in 1631, De Vries had landed a party of Dutch that built the palisaded settlement of Swaanendael, close to today's Lewes, Delaware. On December 6, 1632, de Vries found the inhabitants of the settlement and all of their livestock dead. After a tense interlude with local peoples, it was revealed that the deaths were the result of an all too familiar sequence of cultural misunderstanding. A chief had torn a tin plaque off of a post erected by the Dutch and, fearing that this would displease the Dutch, his compatriots killed him. Friends of the slain chief in turn blamed the Dutch for his death and exacted their revenge on the fledgling settlement. De Vries did not name the group of Indians who participated in these acts, but he later refers to the Sankitan, or Lenape from the northern part of the region (as opposed to the southern Mante, from around Red Hook). Some other writers attribute the events to the Nanticoke (Lawrence 2018). Seeing no effective way to punish the transgression, in part because "they dwelt in no fixed place" (de Vries 1655:23-24), the Dutch gave the assembled chiefs trade goods and made peace.

On January 8th of the new year, de Vries sailed up the Delaware to Fort Nassau, on Timber Creek (Timmer-kill), on the New Jersey side of the river, and met with "nine Sachems from nine different places about there" (de Vries 1655:26-27). By February 3, de Vries says that most of the Native peoples in the vicinity of his vessel had vanished, almost inexplicably. He discovered the answer on February 11, when he met a party of 50 Minqua, or Susquehannock, who were part of a much larger war party of 600. Two days later, on the 13th, he recounts the following (de Vries 1655:30):

> …three Indians of the Armewamen [Armewamus Lenape] came, who were at the yacht before. They told us that they were fugitives – that the Minquas had killed some of their people and they had escaped. They had been plundered of all their corn, their houses had been burnt, and they escaped in great want, compelled to be content with what they could find in the woods, and came to

> spy out in what way the Minquas had gone – the main body of their people lying about five or six hours' journey distant with their wives and children. They told us also that the Minquas had killed ninety men of the Sankiekans; that they would come to us the next day, when the sun was in the south-east, as they were suffering great hunger, and that the Minquas has all left and gone from us, back to their country.

This episode makes it clear that the Susquehannock were ranging across the top of the Delmarva peninsula to raid settlements in the Delaware Valley, probably seeking to push the local inhabitants out and secure trade with the Dutch and Swedes, as they came in. This will become important in assessing the movements of the inhabitants of the project area and the stresses they were under during the Contact and Pre-Contact periods, as well as in explaining some of the archaeological evidence from the project area.

George Fox (1672-1673)

In 1672, Quaker George Fox travelled to the Caribbean and North America in order to spread his religious message. After stops in Barbados and Jamaica, he arrived in Maryland, near what is today Baltimore. After making a circuit north to Rhode Island and then down through New Jersey, Fox found himself back in Maryland in 1673 and on the Eastern Shore.

Unlike many of his contemporaries, Fox was interested in meeting with Native peoples, although it was not simple curiosity, but also a desire to spread his message. His comments on some of these meetings, as well as his descriptions of travel on the Eastern Shore, are relevant for this study. Very shortly after his arrival on Maryland's Eastern Shore, presumably to the south, in or below Talbot County, he "had a meeting" that was attended by a great many people (Fox 1910:394):

> And it was upon me from the Lord, to send to the Indian Emperor and his Kings, to come to that Meeting: the Emperor came, and was at the Meeting; but his Kings, lying further off, could not reach thither time enough: Yet they came after with their Cockarooses. I had in the evening (for they staid all night) two good opportunities with them; and they heard the Word of the Lord willingly, and did confess to it.

Fox felt that the attendees were interested in what he had to say and expressed interest in attending his next meeting, "yet they said, they had had a great Debate with their Council about their coming, before they came now" (Fox 1910:395). The fact that the "Kings" could not as quickly attend speaks to the dispersed nature of the Native peoples at this time, presumably the Nanticoke. In 1607, the Nanticoke had at least four towns, but by the end of the century were said to have ten, with the "Emperor" at Chicone (Rountree & Davis 1997:95). The attendance by the "Emperor," "Kings" (werowances, or chiefs), and Cockarooses (Cockarouse, or councilor and judge [Williamson 2008:110]) also highlights part of the social or political structure and the importance placed on this meeting, with attendance by a range of the

community's leaders, including these importance councilors who would help reflect upon whatever messages were being delivered.

After this meeting, which must have been at the end of August or in early September, Fox and his companions set off overland, heading north to Newcastle and thence to New England (Fox 1910:395).

> We took Horses at the Head of Tredaven-Creek, and travelled through the Woods, till we came a little above the Head of Miles-River; by which we passed, and rode on to the Head of Wye-River; and so got too the Head of Chester-River; where making a Fire, we took up lodging in the woods.
>
> Next morning setting forward again, we travelled through the Woods, till we came to Saxifrax-River, which we went over in canoos (which are Indian boats;) causing our horses to swim by. Then we rode on to Bohemia-River where in like manner swimming our Horses, we our selves went over in Canoos.

The first part of the trip, from Tred Avon to the head of the Chester River, likely followed what were originally Native paths leading up along the high ground of the watershed divide and passing over the headwaters of streams where they were much more narrow and shallow, and thus easily forded.

On his later return south, along a similar path, Fox noted the many "boggs" that slowed their passage. After his return to the Miles River area, Fox's journeys were a whirlwind, moving inland and then by water up to the head of the Chesapeake Bay, with many meetings along the way, some including Native Americans. The water travel, although sometimes constrained by weather, was certainly easier than traveling overland, and meetings accessible by water drew large crowds. Fox remarked on a particularly large meeting at Tred Avon that lasted five days, saying "I went By Boat every Day four or five Miles to the Meeting, and there were so many Boats at that time passing on the River, that it was almost like the Thames" (Fox 1910:397).

After meetings on the Annamessex and Wicomoco, Fox attended a meeting at the head of the Little Choptank River, at Dr. Winsmore's, attended by Native peoples: "And of Indians there was he, who was called their Emperor, and one of the Indian Kings and their Speaker; who all sat very attentive, and carried themselves very lovingly…this was on the Twenty-third of the First Month" (Fox 1910:404). This prompted more interaction (Fox 1910:405):

> And on the Twenty fourth we went by Water ten Mile to the Indian Town, where this same Emperor dwelleth; whom I had acquainted before with my coming, and desired him to get their Kings and Councils together, and had their Speakers, and other Officers with them, and the old Emperor sate among them: And to give them their due, they sate very grave and sober, and were all attentive, beyond many that are called Christians. I had some

with me, that could interpret to them, and we had a very good Meeting with them, and of very good Service it was: for it gave them a good Esteem of Truth and Friends; blessed by the Lord!

Which of the towns this was is uncertain, and one can only speculate how the message brought by Fox was received. Rountree and Davidson note that only two Eastern Shore tribes had paramount chiefs who ruled over the town chiefs, the Nanticoke and the Accomacs/Occohannocks. Given the geography and the presence of both an "Emperor" and chiefs, Fox must have been dealing with the Nanticoke. It is tempting to think that perhaps his focus on inward transformation, and on greater equality and tolerance, would have resonated more with Native peoples than the traditional Christianity to which they had been exposed, but this must remain conjecture. However, the gravitas of his Native interlocutors and their willingness to consider his message clearly impressed him.

Figure 4.1. Excerpt from the Augustine Herman Map of 1670.

Jasper Danckaerts (1680-1683)

Jasper Danckaerts was a Labadist who, along with Peter Sluyter, sailed for New York from Holland on June 9, 1680 on a mission to find land on which his community of dissenters could settle in the Middle Atlantic area. He travelled through the region until his return home in 1683. Having decided upon an area just north of the Sassafras River watershed, on the Bohemia River, Danckaerts received a deed for a colony on August 11, 1684.

After their arrival in North America in late September of 1680, Danckaerts and Sluyter worked their way down from New York to New Castle, Delaware, and in late November began to head south and west into Maryland and the project area. Danckaerts noted that tobacco was the "chief article of trade in the country" and described the demands placed on both servants and planters by the crop (Danckaerts 1913:112). Later he remarked that it seemed to be grown to the exclusion of almost anything else, "as if there were nothing else in the world to plant but that." (Danckaerts 1913:136)

On December 3 they headed west from the plantation of Kasparus Herman, following "a large broad wagon road, which Kasparus had made through the woods, from his house to his father's [Augustine Herman], who lived in the uppermost part of Maryland, that is, as high up as it is yet inhabited by Christians." (Danckaerts 1913:113)

Danckaerts gave a laudatory description of Augustine Herman's Bohemia Manor, observing that Bohemia Manor was excellent land, "indeed the best we have seen in all our journey south, having large, thick, and high trees, much black walnut and chestnut, as tall and straight as a reed." (Danckaerts 1913:114) This would have characterized the landscape prior to the European arrival, and certainly the tall, straight trees to which he referred pre-dated the arrival of Europeans in this area and are evidence of the savanna that characterized much of the landscape and was encouraged by Native peoples. Danckaerts went on to say that "Maryland is considered the most fertile portion of North America, and it were to be wished that it was also the most healthy." (Danckaerts 1913:115) He went on to say that the province was "very rich in fish as well as in all kinds of waterfowl." He also complained of being kept awake by the noise of geese and other waterfowl.

Danckaert had some interesting interactions with Native Americans in New York and New Jersey, and they seem to have been on his mind. He observed that "there are few Indians in comparison with the extent of the country. When the English first discovered and settled Virginia and Maryland, they did great [wrong] to these poor people, and almost exterminated them." (Danckaerts 1913:115)

From Bohemia, the pair eventually headed south toward the plantation of Captain Frisby. They eventually arrived at "the court house standing on the Sassafrix River, which also is an ordinary." (Danckaerts 1913:116)

Figure 4.2. Excerpt from the Augustine Herman Map of 1670, showing the courthouse on the Sassafras River.

On December 5, Danckaerts and Sluyter crossed the Sassafras by ferry, after paying a shilling. The pair then walked west along the south shore of the river until they reached the Bay, crossing several more creeks in the process. They moved from plantation to plantation, sometimes borrowing a canoe to cross a stream, at other times waiting interminably for assistance. They eventually found their way to the Comegys plantation, probably that of Cornelius Comegys. Comegys owned a large number of tracts, as outlined by Earle (Earle 1923:12-13), so it is difficult to know precisely which of these was Danckaert's destination.

The Labadists had intended to head south, eventually reaching Virginia, but Comegys dissuaded them (Danckaerts 1913:120):

> First, the country below there was full of creeks and their branches, more so than that we had passed over, and it was difficult to get across them, as boats were not always to be obtained, and the people were not very obliging…As to going by water, either down or across the Bay, there was not much navigating at this time of year, the winter being so close at hand, and the worst of it would be to get back again…As to

> exploring the land, he assured us that we had seen the best; the rest of it was poor and covered with bushes, especially in Virginia.

On their return back to Newcastle, they again had difficulty in crossing creeks and found themselves lost more than once before crossing back over the Sassafras, describing creeks, gullies, deep hollows, and thickets that slowed them down. They eventually found their way to Kasparus Herman's plantation and then to Newcastle, but on the way described the divide between the watersheds of the Chesapeake to the west and the Delaware (called by the English at that time the South River), as well as a "cart road" that joined the two (Danckaerts 1913:126):

> Upon this road the goods which go from the South River to Maryland by land, are carried, and also those which pass inland from Maryland to the South River, because these two creeks namely, the Apoquemene and the Bohemia, one running up from Maryland, and the other from the Delaware River, as the English call the South River, come to an end close to each other, and perhaps shoot by each other although they are not navigable so far…

This area can be seen on an excerpt from Herman's map (Figure 4.3), where the "Apoquemene" is labeled "Oppoquenmin Cr" (today's Appoquinimink Creek).

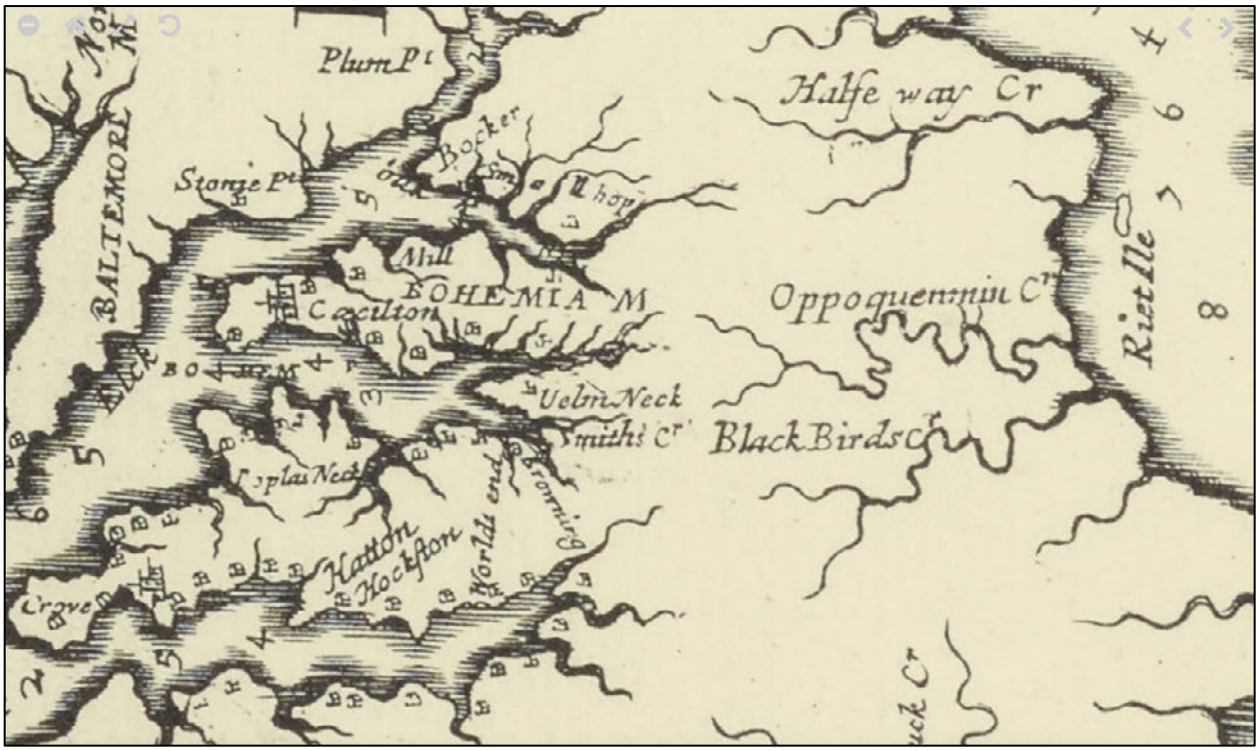


Figure 4.3. Excerpt from the Augustine Herman map of 1670, showing the relationship of the Bohemia River to "Apoquemene" Creek (Oppoquenmin Cr. on the map).

What Danckaerts described was a route that undoubtedly was used as a Native American trade route for many centuries prior to his arrival. Danckaerts also noted that a canal was proposed for this portage area to facilitate the tobacco trade, but it was never carried out. On this part of the journey, Danckaerts also commented on a temporary shed he saw, "made of the bark of trees, after the manner of the Indians." (Danckaerts 1913:128)

The heavy vegetation proved a challenge for the Labadists, even when following the local custom and "mak[ing] our way through bushes by an untrodden path going from one newly marked tree to another… these marks are merely a piece cut out of the bark with an axe, about the height of a man's eyes from the ground; and by means of them the common roads are designated through all New Netherlands and Maryland; but in consequence of great number of roads so marked, and their running into and across each other, they are of little assistance and indeed often mislead." (Danckaerts 1913:129) It seems likely that that dense underbrush the travelers encountered reflects the absence of the periodic "maintenance" undertaken by Native peoples through their use of fire to shape and transform the landscape.

Andreas Hesselius (1712-1722)

In 1711, Andreas Hesselius (brother of the better-known artist, Gustavus Hesselius) received a commission as pastor to various Swedish settlements in North America. In April of 1712 he arrived in the Chesapeake, landing at Herring Bay, in present day Anne Arundel County, Maryland. Within a couple of days of landing he had his first encounter with Native Americans, while walking with his brother (Hesselius 1947:80):

> …two Indians met us almost entirely naked, having only an ugly piece of cloth over their shoulders and the rest of the body entirely bare and brown in color, large and well built. At first sight of these wild people we were somewhat surprised, although they did not stop on meeting us, but only said to us Haita, that is a word of greeting which corresponds to our goodday, showing there by that they were accustomed to European people.

Leaving aside the perjorative aspects of this description, we don't often think of Native peoples as moving about the "English" landscape in this fashion, so it is a useful reminder of their presence even in the early 1700s.

Hesselius traveled from Herring Bay up to Annapolis, and then to Philadelphia, after which he set his sights on Christiana, in Delaware, as a hub of Swedish activity. Nuggets of information emerge in his travel diary, including his encounter with turtle as a food (Hesselius 1947:84):

> I found in the woods near Christina a land turtle… This kind of turtle is found nowhere except in the woods and is used by both Indians and Christians for food. According to my taste it has a most delicate and subtle flavor, especially

> the liver. It tastes best when prepared according to the Indian manner, when it is roasted in the hot embers, although its splendid shell is damaged thereby.

In June of 1712, he observed an example of Native American art, although it cannot be said for certain whether this was used for spiritual purposes or intended for trade (Hesselius 1947:85-86):

> I saw at the house of a Swedish merchant a figure which the Indians themselves had painted in accordance with the form of their maneto. but which they pray to and worship. It is more like a wolf's-head which grimaces and exhales fire and smoke. The body is a dragon body very thick but narrowing out at the tail, where there are some peculiar decoration and characters to be seen. Otherwise the body has no feet or wings but only a couple of out-stretched arms and hands with claws on the fingers, spread out to grasp something.

He was similarly taken with Native products in an entry from April 16, 1716 (Hesselius 1947:102):

> I was in the city of New Castle, where I found that they had a number of small Indian images for sale in a store. These are made by strange Indians of which our English merchant had bought a quantity which they later sell to the Indian of Pennsylvania in exchange for deer skins. The material of which they are made is the same as that of which wampum stones, or Indian money, are made, which I never as yet have been able to find out what it is, either from Christians or heathens. It seems indeed as though it were of white marble, but it agrees perhaps more with oyster shell or some other shell-fish covering. These holy things of the Indians bear the likeness of different animals, birds and fishes, as that of squirrels, owls, or bass, etc., and yet they are not larger then the width of three or four fingers in length. They are , however, very coarse and unskillfully made. These things our Indians are very much desirous of and pay dearly for them, and then [they] let them hang on their breasts on a necklace of glass beads, which they wear around their neck.

Hesselius is describing a shell "runtee" or other carvings. These were made out of shell, similar to wampum. They have been found in Pennsylvania (see Kent 1989:171-174) and in New Jersey. Several were found in excavations of Native burials, along with glass beads in the manner described by Hesselius. A fragmentary runtee has also been found in Delaware, probably in Contact period contexts, at the Clyde Farm Site in Newcastle County. These likely were used in trade with the Susquehannock. The Iroquoian Massawomeck used conch shell "mask" gorgets as well, as part of a trade system that exchanged inland furs for coastal conch and beads made of other marine shells (Rountree *et al*. 2007; Spencer n.d.– see Figure 4.4).

Figure 4.4. Conch shell mask from Putnam County, West Virginia (Spencer n.d.).

Hesselius (1947:87-88) later gave a vivid description of how he viewed the Native peoples with whom he came into contact:

> …a messenger came to me from the chief of the Indians, Captain Pockhaels, with the request that I should recommend him to my brother who is a portrait painter, that he would deliver him some colors, especially vermillion, with which he intended to decorate his face.
>
> At this place I must especially mention something about the Indians or the real native's manner of decorating their bodies. First, it should be noted that these wild people are, as to their stature, complexion, and bodily color, naturally like other human being but they are brownish in color which is caused by the fact that they are smeared immediately from birth with bear fat or other fat, which later so bites itself into the skin from the heat of the sun and the climate that it constantly keeps its brown color and it is said that this fat contributes greatly to the softness which one feels on their hands and skin. And although these wild people have little or no ambition to appear more splendid then others, nevertheless there comes forth in their mind a desire for a manly and splendid appearance, such as they gotten a liking for, namely that they have their long black hair smeared [with fat] and laid in a lock on the one side of the head. Their faces they have decorated with black

> parallel lines, obliquely or straight across the face, or with snake decorations from the forehead down to the cheek, as one of my favorites had, who was the best hunter in the country and was called Shichapinan, who related to me that the paintings and black drawings are tattooed into the skin while they are young, for which [purpose] they take a sharp bone and prick closely and pointwise so that the blood come out, whereupon fine powder is pressed over it, and this leaves an indelible mark after the pointing. [This] is a decoration for the back which a prominent Indian by the name of Schaehae thought himself to look very gallant with. Others on the other hand think otherwise; but in this one thing all are agreed that on certain occasions and at large gatherings they cover the entire face with vermillion, [red] and when they in addition put a turkey pen or the tail of a rabbit fast to the ears they are splendid enough.
>
> They wear no other clothes than a fine Holland shirt of linen and upon it a red or blue square quilt of cloth which they throw loosely over their shoulders and hold fast to the body with the left hand. Instead of stockings they wear a kind of leggings of cloth which they make in a special way with a flap or wings which stands out on both sides of their legs. They do not wear shoes but only moccasins, just like our Lap shoes, which they prepare for themselves of deerskin. They never wash their underclothes but let them sit on the body [until they] fall off by themselves or [until they] procure new ones.
>
> The women are all dressed like the men; but for decoration of their head they have their hair hanging in a knot on their back, which they are very afraid to lose, because in this the witness of their honor consists.
>
> Their house and dwellings are nothing but leaf or skin or bark huts, which they easily move wherever they wish.
>
> Nor do [they] have many household good to take with them. The principle occupation of the men is to hunt and fish, but that of the women folks is to make baskets or so called tassar as well as rugs and other small things of wooden strips, besides the most pressing [work] which is the planting of corn and caring for it.

Hesselius presumably is describing the Algonquian Delawares, whose cultural affinity with the inhabitants of the project area makes these descriptions a valuable touchpoint.

Hesselius was keenly interested in burial practices and mourning, offering two descriptions. In February of 1713, he wrote (Hesselius 1947:100):

> February 13, I saw an Indian funeral when an Indian, called Cottehe was buried in a Christian's orchard in the presence of King Piminae, who treated me well in his manner. The burial ceremony was not like that usually used by the other Indians; for here the dead body was laid in a coffin, just like any other corpse, but he had nevertheless both stockings and shoes on him, entirely new and made according to the Christian manner. The face was painted entirely red with vermillion. In one of his hands was placed a little white stripped glass bottle and in the other a pair of new tobacco pipes. As soon as the corpse was put down into the grave, which was covered with boards, the [pall] bearers divided the property and remains of the dead one between themselves immediately on the burial place. But the father and the widow carried on a miserable lamentation.

Many years later, in 1722, he attended another burial (Hesselius 1947:116):

> July 26, I saw the burial of the Indian [named] Tillis with all the ceremonies that the Indians use. The lamentation if the Indian women is very curious and a constant singing *vae vae Nishana*, *vae Nishana*, that is Oh! Oh! My Child. During this lamentation they shake their heads and close their fingers hard in their hands and again take to their bottles and drinking rum and cider until they become quite drunk, constantly crying their *vae Nishana*. When one of our Swedes asked them how they could drink in such great sorrow, the Indian women answered in her language: How could we cry if we got nothing to drink? A good Indian reason.
>
> The dead one was not laid into the grave until the widow, who was blackened in the face with soot together with three other Indians, had run and jumped twice over the corpse, and thereupon they ran a little while by themselves in the woods and plucked a [few strands of] grass. Then they came back to the grave again and then the dead person was laid down [in it] without a coffin and covered with straw without earth. The face turned toward the west, for he must, they say, follow the sun when he rises. The grave was covered with boards and a heap of earth was thrown over it, around which a fence was placed. After the burial the [pall] bearers went aside and distributed among themselves the property of the dead person, which consisted of few fathoms of wampum, a gun, an ax, a mirror and tobacco utensils.

Finally, Hesselius occasionally spoke to indigenous knowledge, as in this entry from September 8, 1716 (Hesselius 1947:102):

> …my oldest son [who] was two years old [was] very ill with worms when an honest Indian woman, called Chicalicka Nanni Kettelev, the sister of King Shikkans, under took to cure him with a kind of grass roots, which she

> brought from the wood close to the parsonage, telling beforehand of all the effects the medicine would have, especially vomiting, sleeping, etc. But it is to be observed that she did not allow anyone from my household to follow her to the woods, so that no one would recognize the grass.

The observations from these four travelers clearly are colored to a degree by cultural misperceptions and come from outside of the project area, but given the dearth of information specifically from the two watersheds, the cautious use of these descriptions adds a level of detail that helps to understand the circumstances and practices a century after the initial contact by John Smith and his contemporaries. They also add insights into the topography, vegetation, and nature of early European settlement.

CHAPTER 5
NATIVE PEOPLES IN THE PROJECT AREA , AD 900 – 1700

Background to the Algonquian Peoples

Gallivan (2016) and Clark (2019) have summarized the development of the Algonquian as a culture and linguistic group, as well as the migration of Proto-Algonquian speakers from near the present-day Great Lakes east to New England and then south along the Atlantic coast. Their arrival in the Chesapeake and the Albemarle Sound region was the last part of this movement, with an arrival between 500 BC and 900 AD. "Over the following centuries, Native communities in the coastal Chesapeake created persistent places organized around harvesting estuarine resources and during aggregation events, some of which involved forager-fishers from different communities of practice" (Gallivan 2016:73).

At the time of contact with Europeans, there were at least 17 Algonquian languages spoken from eastern Canada down through the Chesapeake and into the North Carolina Outer Banks, sharing distinctive cultural patterns that set them apart as a group. Both Clark (2019) and Gallivan (2016) note a shift among archaeologists toward considering migration and population movement, recognizing an accord between Native oral traditions and linguistic and archaeological evidence. That linguistic evidence gives a sense of the timing for some of these movements.

Luckenbach *et al*. (1987) used glottochronological comparisons of seven Eastern Algonquian languages to estimate a divergence from the earlier base language at about 200 AD, while Fiedel (1999, 1990) sees this as occurring some time between 200-900 AD. Denny (2003) came to similar conclusion, so AD 200-900 seems generally agreed upon, putting this development in the Middle Woodland period. But by the Late Woodland and the beginning of the time frame considered in this project, Algonquian speakers were firmly ensconced across the Delmarva and the project area, and a distinct pattern of life had emerged. Before exploring these patterns, we must address the question of who they were. Some of the best images we have are the drawings by John White, an artist with the Roanoke expedition of 1585. Although they depict Algonquians of Coastal North Carolina, the similarities make them extremely informative, and they are used below to illustrate various aspects of Algonquian life.

By the time of contact and John Smith's 1608 exploration of the upper Chesapeake Bay, there were two major groups in the two watersheds, the Tockwogh along the Sassafras and the Ozinies or Wicomiss along the Chester. In addition, a smaller group, the Matapeake or Monoponson, was on Kent Island. The Susquehannock had moved south along the Susquehanna River and were making their presence known at the head of the Bay, while another Iroquoian group, the Massawomeck, raided the area. Neighboring groups included the Choptanks and Nanticoke to the south, and groups of Delaware or Lenape to the east and northeast. Many of these groups have received close scrutiny by historians, archaeologists, and

others, but what do we know about the primary residents of the watersheds studied in this investigation? As it happens, they have received far less attention.

Figure 5.1. Indian man in body paint. John White (1585). (John White Drawings, Virtual Jamestown, The Institute for Advanced Technology in the Humanities, University of Virginia)

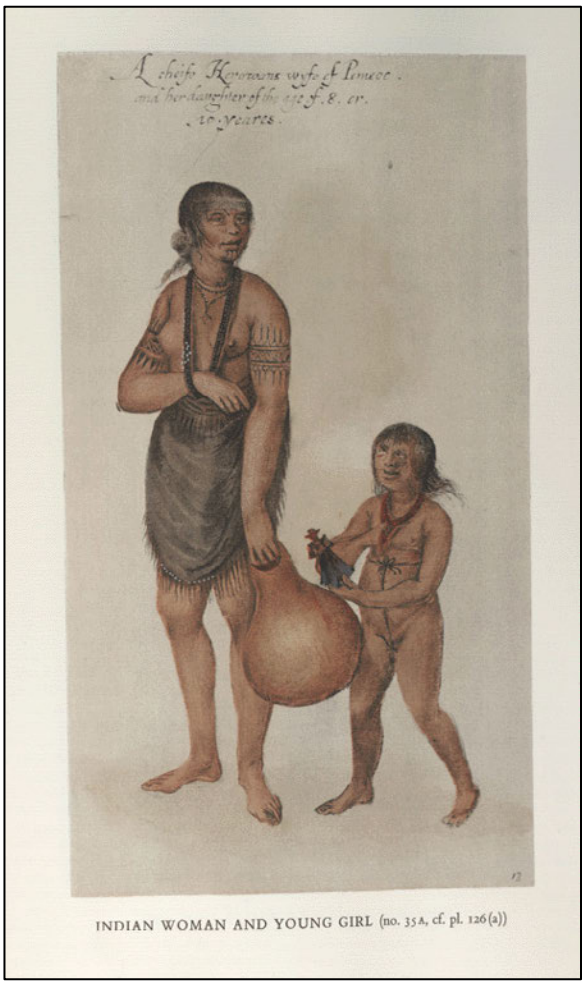


Figure 5.2. Indian Woman and Young Girl (1585). (John White Drawings, Virtual Jamestown, The Institute for Advanced Technology in the Humanities, Univ. of VA)

(Both images: http://www.virtualjamestown.org/images/white_debry_html/jamestown.html)

The Tockwogh

John Smith's descriptions of the Tockwogh give us our first glimpse of the Algonquian tribes of the Upper Eastern Shore. After his encounter with the Iroquoian Massawomek in August of 1608, Smith met up with the Tockwogh:

> Entring the River of Tockwogh the Salvages all armed in a fleete of Boates round invironed us; it chanced one of them could speake the language of Powhatan who perswaded the rest to a friendly parly: but when they see us furnished with the Massawomeckes weapons, and faining the invention of Kecoughtan to have taken them perforce; they conducted us to their pallizadoed towne, mantelled with the barkes of trees, with Scaffolds like mounts, brested about with Barks very formally, their men, women, and children, with dances, songs, fruits, fish, furres, and what they had kindly entertained us, spreading mats for us to sit on, stretching their best abilities to expresses their loves.
>
> Many hatchets, knives, and peeces of yron, and brasse, we see, which they reported to have from the Sasquesahannockes a mighty people, and mortall enimies with the Massawomeckes; the Sasquesahannocks, inhabit upon the chiefe spring of these 4. Two daies journey higher than our Barge could passe for rocks. (Smith 1986:231)

These passages yield a variety of useful information about the Tockwogh, with whom Smith stayed for several days. He does not describe any subsidiary villages, but Rountree and Davis (1997:32) think it likely that the Tockwogh territory encompassed the environs of the Sassafras and more. From Smith's descriptions in *Proceedings*, one gets that sense that the Tockwogh may have been subservient to or clients of the Susquehannock. Certainly they were less powerful. In his *Map of Virginia,* Smith described the strength of both the Tockwogh and the Ozinies to the south:

> On the East side of the Bay is the river of Tockwogh, and upon it a people that can make 100 men, seated some 7 miles within the river: where they have a Fort very wel pallisadoed and mantelled with the barke of trees. Next to them is Ozinies with 60 men. (Smith 1986b:150)

These descriptions portray a palisaded village, a defensive measure no doubt prompted by raiders such as the Massomeck (Figure 5.3). They also suggest a relatively low population for this part of the Chesapeake, especially compared to the 600 men that Smith said the Susquehannock could assemble. Using a multiplier of 3.33 for each man (Gallivan 2016:30), this would put the Susquehannock at a population of just under 2,000, the Tockwogh at 333, and the Ozinies at 200. The low Tockwogh population was perhaps due to the pressure from raiding Massawomeks and the steady push southward of the Susquehannock people. Feest (1978:242) puts the total number of people in what is now Kent County and the Chester River area as no more than 500 during this period, although this should be viewed with caution. Most authorities feel that the people that Smith called the Ozinies were the same as the Wicomiss (Davidson 1993:142; Curry 1998:14), and we concur. However, the Wicomiss were strong enough in the 1630s to resist the push of the Susquehannock (Rountree and Davidson 1997: 89). Although the Wicomiss eventually were subjugated (by 1648), their ability to effectively resist the Susquehannock for a time suggests that the number of fighting men they could

muster was much greater than the 60 reported by Smith. There is no evidence to suggest that Smith himself encountered the Ozinies, and he must have heard about them second-hand, probably from the Tockwogh. The Tockwogh appear to have had a strong interest in allying with the English against the troublesome Massawomeks, and it might not have been to their advantage to tell Smith that a large group – or a bountiful river – lay just to the south.

Figure 5.3. "Indian Village of Pomeiooc," a palisaded village. John White (1585). (John White Drawings, Virtual Jamestown, The Institute for Advanced Technology in the Humanities, University of Virginia; http://www.virtualjamestown.org/images/white_debry_html/white31.html)

A logical question is what the name "Tockwogh" meant. It seems probable that this is a variant of the word for tuckahoe, or arrow arum. Kenny (1950:310) sees it as etymologically the same, referring to both the tuber and food made from it. But it also is likely that, as with so many other names attached to people of the period, it is a place name, perhaps referring to a place where tuckahoe was abundant. The place name need not have been attached to the

actual location in which Smith visited their village, but could have been a name applied to their river. There is no way to know for certain, but it seems most likely. In any event, the Tockwogh (and Susquehannock) clearly were a major focus for Smith, and there is no evidence that he met or had first-hand knowledge of the Ozinies/Wicomiss. Evidence for their nature, and for the fate of the Tockwogh, must come from other sources.

There are almost no references to the Tockwogh after John Smith's visit with them in 1608. They simply do not appear in any of the Maryland provincial papers or in the slightly earlier accounts of Claiborne's settlement, indicating that they were gone by the early 1630s. Where they went is unknown. It seems likely that the more powerful Susquehannock pushed them out, once it was clear that there was access to English trade via the head of the Bay. This motive would only have been reinforced with the arrival of the Dutch and Swedes in the neighboring Delaware River. In a note, Barbour (1986, Vol. 1:190, n. 8) states that the Tockwogh "later merged with the Kuskarawaoks to form the so-called Nanticokes of Pennsylvania." Kuskarawock actually was the principal town of the Nanticoke, south of the project area, and the names sometimes were used interchangably, but here Barbour is referring to the later migration of many Nanticoke to Pennsylvania in 1742 or 1743 (Weslager 1943). An earlier southern movement of the Tockwogh and refugee status with the Nanticoke certainly might have been possible, but we simply do not know this with certainty.

The Wicomiss

William Marye, a devoted student of the Native Americans of the Eastern Shore, spoke for many historians and archaeologists when he said that "The student of the Indians of this part of Maryland has hitherto, apparently, found himself "up against a stone wall" when he attempted to identify the Indian peoples who may have dwelt in that section [of the Eastern Shore] which lies northward of the Choptank River…" (Marye 1938b:146). But of the Wicomiss there are early glimpses, and later they come into sharper focus.

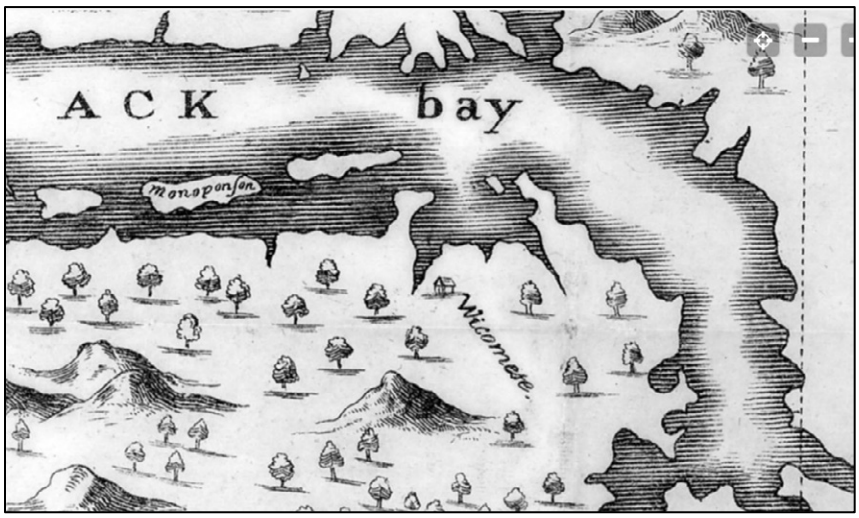


Figure 5.4. Extract from a 1635 map of the Chesapeake (Hawks 1865)

A rather generalized map of the Chesapeake was published in 1635 and republished by Hawks in 1865, showing the "Wicomese" in the upper part of the Eastern Shore, as well as the "Monoponson" on an island to the south (Figure 5.4). Marye (1938b) points out that the author of the 1635 *Relation of Maryland* (Hawks 1865) has nothing to say of the Nanticoke, but does shed light on some of the interactions between the Wicomiss, the Susquehannock, and the Englishmen at Claiborne's settlement on Kent Island. According to the "Relation" (Hawks 1856:41-42):

> It happened the last yere [1634], that some of the Susquehanocks and the Wicomisses (who are enemies) met at the Island of Monoponson, where Captaine Cleyborned liveth, they all come to trade, and one of the Susquehanocks did an Injury to a Wicomisse, whereat some of Cleybornes people that saw it, did laugh. The Wicomisse feeling themselves thus injured and despises (as they thought) went away, and lay in ambush for the returne of the Susquehannocks, and killed five of them, onely two escaped; and then they returned againe, and killed three of Cleybornes People, and some of his cattle; about two months after this was done, the Wicomisse sent a messenger unto his Lordships Governor, to excise the fact, and to offer satisfaction for the harme that was done to the English: The Wicomiss that came with the message, brought in his company and Indian, of the Towne of Patuxent, which is in the next neighboring Towne unto the English at Saingt Maries, with whom they have good correspondence, an hee spake to the Governor in this manner.
>
> I am a Native of Patuxent, as this man(whom you know) can tell you, true it is, I married a wife among the Wicomisses, where I have lived ever since, and they have sent me to tell you, that they are sorry for the harme, which was lately done by some of their people, to the English at Monaponson; and hope you will not take the rash act of a few young men (which was done in heate) a quarrel to their Nation, who desire to live in peace and love with you, and are ready to make satisfaction for the injury, desiring to know what will give you content, and they will returne such things as were then taken from thence: But withal, they desire you not to thinke that they doe this for feare, for they have warres with the Susquehanocks, who have by a surprise, lately killed many of their men, but they would not sue to them for peace, intending to revenge the injuries, as they could find opportunities, yet their desire was to have peace with the English.

The Governor asked them to turn over the guilty parties and return the stolen goods. The Wicomiss representative negotiated, saying that their custom was to exchange the life of a person with 100 "arms" of Roanoke, or beads, and since the English were the newcomers, they should conform to local custom. The Governor does not seem to have agreed, but the "Relation" leaves us hanging as to the final outcome.

Despite the inconclusive ending, the episode makes it clear that in 1634 both the Wicomiss and the Susquehannock were trading not just at the head of the Bay, but on Kent Island itself. This meant that the Susquehannock were moving through or on the edge of Wicomiss territory, and that there was no love lost between the two tribes. It also speaks to the strength of the Wicomiss, reinforcing our assessment that they were more populous than Smith thought. Also, the narrative shows that the Wicomiss had a relationship with at least some of the Patuxents on the western side of the Bay, while also pointing to the way in which disputes were sometimes handled.

A frustration in the research for this project was that a thorough scouring of the Maryland Archives for refences to the Tockwogh, Ozinies, and Wicomiss revealed very little – the records are all but silent. However, there are glimpses of the Wicomiss in their relations with the English and other groups, primarily in conflict. The "Relation" (Hawks 1865) clearly shows the conflict between the Wicomiss and the Susquehannock, with the latter evidently pushing south into their lands. The Wicomiss successfully resisted these incursions through 1632, although they appear to have been costly, but by 1648 had lost the struggle and were forced to fight under the Susquehannock. This was a messy process, complicated by the English. In 1642, another killing of Englishmen on Kent Island prompted the English to declare war on the three major tribes of the Eastern shore simultaneously, the Wicomiss, the Susquehannock, and the Nanticoke. The inclusion of the latter has puzzled historians, but Rountree and Davidson (1997) speculate that it might have been due to misunderstanding of the differences between the three groups, or perhaps there had been enough encounters that they decided that all three needed to be brought under control. No doubt a contributing factor was the reluctance of these groups to accept English law and authority. Perhaps realizing both the geographic and cultural distance between the Susquehannock and the Nanticoke, the English quickly resolved their conflict with the Nanticoke. But they remained at war with the Susquehannock until 1652. After that date, the Susquehannock allied with the English in their protracted conflict with other Iroquoian groups. The price of peace for the Susquehannock was to relinquish their claims to the upper portions of the Eastern Shore, opening it to English settlement (Rountreee and Davidson 1997).

The 1652 treaty with the Susquehannock ceded to the English all the lands "from Choptanke River to the North East Branch w^{ch} lyes to the Northward of Elke River. On the Easter Side of the Said Bay with all the Ilands, Rivers, Creekes Trees, ffish ffowle Deere, Elke and whatsoever else to the same belonging Excepting the Ile of kent, and Palmers Ilands which belongs to Captaine Clayborne. But Nevertheless it shal be lawfull for the aforesaid English, or Indians to build a Howse or ffort for trade or any such like vse or Occasion at any tyme vpon Palmers Iland." (Browne 1883, Vol. 3: 277) This has led some to suggest that the Wicomiss territory was larger than previously recognized, perhaps encompassing all of those lands south of the Sassafras down to the Choptank (Gesta Septrionalus 2020), as seen in Figure 5.5. Marye (1938b) posited that Wicomiss territory may have extended from the headwaters of the Sassafras down to the upper areas of the Choptank, Nanticoke, and Wicomico rivers. But these suggestions as to the southern extent of the Wicomiss seem unlikely. The Nanticoke were a

large and powerful tribe, and given the need for hunting grounds at the head of tributaries, as well as the desire for trade routes that crossed from the Chesapeake watershed into the Delaware and Atlantic watersheds, it seems highly unlikely that the upper stretches of the Nanticoke River would have been controlled by the Wicomiss from the north. But it does not seem unreasonable to expect that their control would have encompassed the headwaters of the Choptank River. Perhaps even more likely is a struggle for control over those headwaters with the Choptanks, who historically were at odds with the Wicomiss.

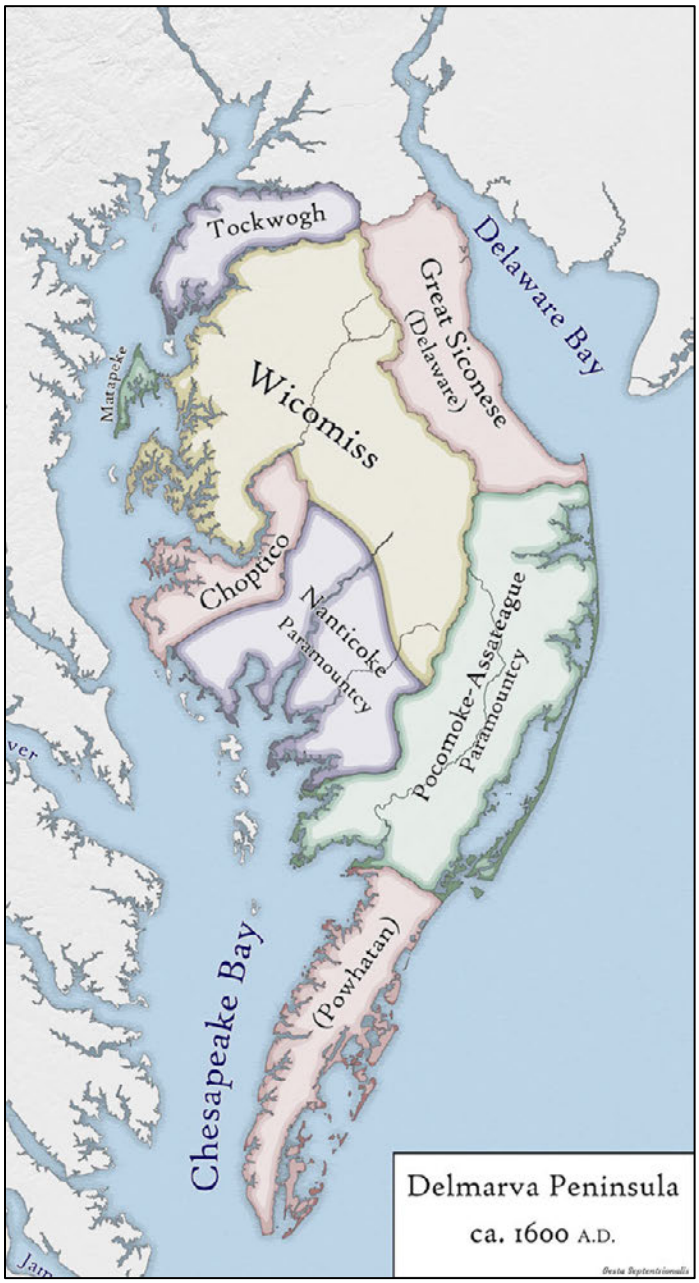


Figure 5.5. Hypothetical tribal territories on the Eastern Shore (Gesta Septrionalus 2020).

From 1650 on, there are no references to the Wicomiss in their original area, but instead they were living to the south of the Choptank, in Nanticoke territory, and among the Sicconese in southern Delaware. In the 1660s, the Wicomiss were still at odds with the English, but the Nanticoke allowed them unrestricted movement through their territory. But the 1667 murder of provincial official Captain Odber by the Wicomiss prompted the dispatch of a provincial force to destroy them. The Choptank Indians aided the English, and one of their chiefs caught the murderer and turned him over to the province. The supposedly guilty party, Anatchcom, was taken to St. Mary's City by some Ababcos Indians by order of their leader Ababco. During questioning, he was asked his name and he stated "Anatchom a Wiccomis Indian." He stated the Wicomiss lived "a small days Journey to Delaware" and that he was "the only Wiccomis that went to Delaware." He said his wife that had been killed in the house of William Hemsley in Talbot County, and he further confessed that he was with a group of men that killed Odber, but that he did not personally kill him. Another Indian testified that Anatchcom was the guilty party, and he was ordered to "be shott to death here at St. Maries sometime before three of the Clock this Afternoon" (Browne 1883, Vol. 2:196).

With dwindling fortunes, the Wicomiss were by this time under the protection of the Nanticoke. But Anatchcom's death did not end the conflict with the English and, probably fearing that they would be dragged into a wider war, the Nanticoke decided to deny the Wicomiss their protection and right of free movement and to give them up. In 1669, the Wicomiss were reported to have drawn the Mathwas (Delaware) into an alliance, but this accord was fleeting. According to Rountree and Davidson (1997:105), by 1669 the Wicomiss had been almost completely destroyed and some of the tribe were sold as slaves in Barbados. The Council of Maryland laid this as one of its charges against Lord Baltimore, saying the "he likewise in the former Indian Wiccomisso Warre, when they tooke all the plunder from the poor souldiers and sent the Indian prisoners to Barbados for Negros, but forced the poore inhabitants to bear and pay all the charges" (Browne 1883, Vol. 5:136). After this, the Wicomiss vanish from the historical record.

The Matapeake or Monoponson

We have seen "Monoponson" on period maps (see the 1635 map in Figure 5.1), located on today's Kent Island. This term is used interchangeably with Matapeake (or Matapeke), and both seem to be place names equated with a people. According to Kenny (1950:181), "Monoponson" translates to "island where tubers are dug." He concludes that Matapeake means "Great Water Land" and that "Mattapex" is the English plural (Kenny 1950:162). Less is known about this group, and they appear only fleetingly in the archives. Maryland entered into a treaty with them in 1659 (Browne 1883, Vol. 3:363). In 1652, Francis Hunt, who lived near the Matapeakes, was slain by the Indians of the Isle of Kent (Scharf 1879). Scharf (1879:138) also reported a tradition that "an atrocious massacre was once perpetrated upon these Indians by the colonists, who invited them to an interview, and while they were performing their humble salutations, slaughtered them without warning. The legend associates this cruel deed with a barren spot, still called "Bloody Point," a little northwest of Kent Point, the southern extremity of the island."

Some see them as having moved off the island fairly early, given that it is the first place in the region to have seen English settlement (Marye 1938b; Maryland Manual, n.d.). However, there is an interesting appearance of Native Americans on Kent Island much later. Scharf (1879:138), writing in 1879, said that a remnant of the tribe, about fifteen in number, were still living on the island a hundred years earlier. He notes (Scharf 1879:138, footnote 1) a pension record from James Bryan, in which Bryan stated:

> I remember the Indians; their last dwelling place was upon the northwest side of the island, near the mouth of Broad Creek; and they lived in their cabins of bark upon a small tract of woodland near the gate which opens upon the estate now owned by General O'Donnell, of Baltimore. I was then a well-grown boy. They always seemed friendly… I also remember the very time of their departure. They left the island near the mouth of the creek, and turned their faces westward. They were the last of the Indians upon the island.

Bryan was born in 1755 (Scharf 1879:138, footnote 1), so this departure presumably would have occurred in the 1760s or thereafter. This highlights the possible presence of remnant Native populations (whether Matapeake or others) in other parts of the project area at later dates, but they are simply not yet visible in other historical or archaeological records.

The Iroquois

Pendergast (1991) identifies the Massawomeck as the *Antouhonorons*, an Iroquoian group that originated between Lakes Erie and Ontario, and moved down to present-day West Virginia and western Maryland. In the decades prior to Smith's voyage, they "regularly harassed the Susquehannock Iroquoians on the lower reaches of the Susquehanna River and the Nanticoke, Conoy, and Powhatan Algonquian bands on Chesapeake Bay. These Antouhonoron Iroquois were known to the Chesapeake Bay Algonquians as Massawomeckes and it is by this Algonquian name that they became known to the English…" (Pendergast 1991:69). Coming down the Potomac, they left it in its middle courses to hop over to rivers such as the Patapsco and Patuxent, allowing them access into the upper Chesapeake Bay (the headwaters of both the Monacacy River and Seneca Creek, tributaries of the Potomac, lie close to head waters of the Patuxent and Patapsco Rivers).

Pendergast (1991:70) refers to the Tockwogh when he relates that "the Nanticoke Tockwogh Algonquian band at the head of the Chesapeake Bay on the Sassafras River, who had by 1608 come under the suzerainty of their more powerful and more numerous Susquehannock Iroquoian neighbors, also possessed significant quantities of European goods. As a result, they were the target of Massawomeck/Antouhoron marauders." He notes that not all Algonquians were hostile to the Massawomeck, with the southern Nanticoke having reached a *modus vivendi* and established a regular trade of marine shell and European goods. By 1627, the Massawomeck had established control over the Conoy Piscataway and eased their raids on the

upper Bay, as they had sufficient trade in European materials via the Potomac. By 1632, they had largely moved from the Niagara area to the Appalachians west of the Chesapeake Bay, affording more reliable access to the trade goods they sought from the English. Pendergast (1991:72) says that the last reference to the Massawomecks is in 1672, and "thereafter there is silence." But for a time, they certainly left their mark. Their raids are almost certainly the reason for the palisaded defenses of Tockwogh, and it seems likely that the western shore of the Chesapeake Bay, from the Patuxent up to the Patapsco, was a no-mans land as a result. Smith (1986a:148) referred to the area around the Bolus River (Patapsco), north of the Patuxent, as "not inhabited," and Barbour (1964), drawing on Russell and Todkill, notes that they reported seeing no people along that shore from the Patuxent up to the mouth of the Susquehanna.

The Susquehannock, of course, were the new powerhouse of the upper Chesapeake at the time that Smith arrived. We have already seen something of their conflicts and alliances with the English and their Algonquian neighbors. They first appear around 1500 AD, farther north up the Susquehanna River, and by 1575 they controlled an area centered around present-day Lancaster County. They ranged well beyond their immediate environs, showing a presence in the upper Potomac Valley in the mid-1500s (Kent 1989). By 1608, the Susquehannock's principal village seems to have been in or near present day Washington Boro, Pennsylvania, coinciding with the place marked *Susquesahanough* on Smith's map (Figure 3.1). Based on Smith's account related earlier, it seems likely that the Tockwogh were clients of the more powerful Susquehannock. They may even have acted for them as a buffer with groups farther south, while taking some of the Massawomeck's attention away from the Susquehannock. By the 1630s, the Susquehannock were raiding into the Delaware Valley, where they were known to the Lenape as the Minqua (de Vries 1655). The Susquehannock thus were a powerful geopolitical force in the region, stimulating trade, harassing the unwary, and displacing people such as the Tockwogh when their presence became inconvenient.

Later Arrivals in the Upper Chesapeake Bay

In the late 1600s, the area that is now Cecil County or northeastern Maryland immediately above the Sassafras River appears to have been a culturally open, "frontier" area and a contested landscape. This is particularly significant considering the intensification of English settlement in Maryland and underway in Pennsylvania/Lower Counties/Lower Delaware Valley immediately adjacent to it. A cultural diversity can be seen in the nature of the different groups settling in the area, well established in historical studies. That Maryland authorities considered this area a "frontier" can be seen in their concerns about Catholic servants who settled lands "at the Head of the Bay" around 1706 (Browne 1906, Vol. 26:568-569). There, these "Irish Papists" had "seated in Great Numbers in Baltimore County and at the Head of the Bay Frontiers of this Province most liable to the Invasion of the common Enemy."

A lesser-known part of this process seems to be the occupation, and re-occupation, by Native peoples within this area. It is clear from the documentary sources that the Maryland government saw many potential threats in the northeastern part of the colony. Native

movement and relocation into the Bay area has to be seen within the context of the broad imperial conflicts that started around 1689, and the resultant fighting in New England. However, one of the earliest of these groups were Susquehannock peoples who had returned to the region well after their political and military hegemony had been shattered. Writing to Governor Charles Calvert on August 6, 1676, several local officials stated that "Wee have lately received intelligence from the Head of the Bay that the Susquehanough Indians have resided at their Old fort about sixty miles above Palmers Island for so many months that they have now Corne fit to roast. That they shortly expect the remainder of their troopes, and as many of the Western Indians neer or beyond the Mountaines as they have been able to perswade to come and live with them" (Browne 1896 Vol. 15:122).

In 1692, another group arrived and caused alarm in the Maryland colony. Their arrival was reported in a February 15, 1692 letter to Governor Copley from a Mr. Charles James of Cecil County. James stated "The supposed King of the Indians together with the French man who were this Summer rec'd by Coll^{o} Herman and now resident upon his Manor together with Eight Hun^{d} Indians which are to Come in amongst us this Spring hath so alarmed the Inhabitants of this County (upon suspition of their being northern Indians) that I thought it my duty to enquire into the matters with all speed imaginable and in order thereunto I sent for one Drury whom I was sensible had been in the late wars in New England" (Browne 1983 Vol. 8:458-459). Correspondence dated "March 10th 1692" from Governor Copley to Governor Fletcher in New York suggests the arrival of these Indians was prior to that date (Browne 1983 Vol. 8:479).

Drury's and another man's report indicated the "French man" had an Indian wife and that he was seen in a "Coat lined with rich Fur this winter," and that an Indian was "seen naked in a Bitter Cold day." These and other factors were taken as evidence that the Indians were "suspected to be northern Indians." In the same letter, the Frenchman was identified as a "Mon^{s} Casteene" and one who had "imbrued their hands in so much Protestant Blood in New England."

Robert Drury provided additional information on what he saw happening. On February 22, 1692 he stated "I came from the Indian Cabbin I informed Captain James & Mr. Tilton that I saw the Wife of Mon^{s} Casteene and those Indians that I saw are Northern Indians that came from Penobscott, and "These Indians that I saw was upon Coll Harmans Mannor this day abovesaid I came from their Cabin" (Browne 1890 Vol. 8:459). Charles James further stated to Governor Copley "In my former [account] I gave your Excellency an Acco^{t} of what I had by Information from Robert Drury and many others Concerning the French Man together with those Northern Indians that have now Erected their Indian Fabricks upon Coll Hermans Mannor and no doubt think themselves safe enough from any discovery" (Browne 1890 Vol. 8:459-460). The reports coming in appeared to confirm the Marylander's suspicions. James indicated that Drury knew "the Indians by face but especially the Wife of Mons^{r} Casteene whom he saw amongst the rest of their cabins and says that these are Penobscott Indians a fort scituate upon the Confines of the French to the Eastward of New England."

Maryland's first Royal Governor seemed to concur with the reports he had received. Writing from St. Mary's City on 10 March 1692, Copley told Governor Edmund Andros of Virginia that "We have been lately alarmed from the Report of a Parcell of Strange Indians lately seating themselves at the Head of the Bay in this Province and a greater Number expected they pretend to Come from the Southward and to desire leave to dwell among us in Amity but by what Inspection has been made therein some testimonies taken and Several Circumstances thereunto Relating, we have great Reason to suspect them to be Northern Indians and our Enemies designed for mischief" (Browne 1890 Vol. 8:479). He reiterated the presence of a "French man strongly presumed to be "Mons^{r} Casteene," the presence of his "Wife," and stated there was "Evidence of Person that had formerly been in the wars in New England and having the sight of those Indians in their Cabins at the head of the bay did Certainly there see this Casteenes Wife among them and severall other Indians which he knew to be of that Gang" (Browne 1890 Vol. 8:479-480).

Within a month this all changed. On April 11, 1693, writing to Governor Fletcher in New York, Governor Copley stated "We have only to add that this day we discovered the French-man & the King of those Strange Indians lately come into our province & seated themselves at the head of our Bay as formerly we understand hath been intimated to your Eccellency by our Governor the French man was at first Supposed or Suspected to be one Mons^{r} Casteene the grand Enemy of the English & one that hath committed much Spoil but since upon better Enquiry & examination we find our mistake and him another person named Martin Shortive & the Indians declare themselves a nation called Stabbernowles come from the Southward formerly fled from the Twittawees but how far to be credited we Cannot yet resolve" (Browne 1890 Vol. 8:524-525). He stated further "that it is at present to let them sit quiet, & treat them civilly until our Assembly & then leave the whole matter to the more strict Examination & inquisition of that Body of the Province having appointed the Indian to attend at that time in order to a further treaty & Entering into a League with them if it shall then appear that they are Friends & come in the way of peace." Governor Andros's April 22, 1693 response was positive towards the Maryland government's decision, however, he cautioned by saying "but do not know how it Can be well that the Frenchman be in repute or at all Suffered to live with them" (Browne 1890 Vol. 8: 530). Despite their accommodation, the arrival of these newcomers into Maryland triggered defensive measures that included the creation of ranging units ("Rangers") and fortified outposts in northeastern Maryland.

Although the outcome of this episode is not clear, there is no evidence that these Native peoples left Herman's manor, or the general area for that matter. Archival references to Indians residing "at the Head of the Bay," continued efforts at treaty negotiations, and appropriations for defensive measures on the part of the Maryland government continued through the 1690s and into early 1700s (Browne 1902 Vol. 22:164, 222). That the Maryland government took this seriously can be seen in the June 1, 1697 creation of a "Committee" whose purpose was the "considering [of] the Indians affair and making proposals what may be most proper measures to be taking for Quieting their fears and securing the province &c" (Browne 1899 Vol. 19:570).

Are the Indians referenced in later documentary sources the same ones that arrived in 1692? Or were they a different group(s) that came later? Who were the "Mountaine" Indians? Based on other accounts, the "Stabbernowles" seem to have been Shawnee, led by Martin Chartier ("Shortive"), who was indeed a French Canadian (Sipe 1927;Bedell *et al.* 2011). They appear to have left in 1692, heading into Pennsylvania, but the recognition of these Native peoples on the landscape has archaeological implications. The references to such a large number of Indians (800 or so) being present on Augustine Herman's Bohemia Manor, along with their "Cabbins," suggest the presence of an intensive occupation that produced a significant archaeological site within the boundaries of the manor itself. Moving beyond the manor proper, archaeological surveys need to take into account the potential presence of Native occupied sites with much later dates then usually anticipated. What is more, it is likely that they moved throughout a larger area in the upper Eastern Shore, rather than being restricted solely to Bohemia Manor. The extent to which they might have visited the Sassafras and Chester River watersheds is unknown, but it cannot be discounted. While the northern or southern origins/identity of these new arrivals have as yet to be determined, the presence of a material culture distinct from the local assemblages should be archaeologically visible. What would the range of material culture look like for the peoples that remained into the late 17th and early 18th centuries, or beyond? Such sites will be significant contributing elements to the understanding of Native cultural landscapes, and speak to the complexities of Native cultural accommodation and survival during the process of English colonization in the Chesapeake Bay region.

As we will see in a later chapter summarizing the archaeological evidence from the region, there also is the possibility of other people moving into the study area, at least temporarily. These later movements of people often go unmentioned in the historical record, so the possibility of later arrivals and return visits by descendant populations must always be kept in mind.

Bridge to the Present – Contemporary Native American Voices

Unlike most of the other Indigenous Cultural Landscapes in the Chesapeake, there are no obvious descendant populations still resident in the Chester and Sassafras River watersheds. The Tockwogh are invisible after 1608, and the Wicomiss seem to have left the project area by 1650, when they were located south of the Choptank River. As we have seen, there was a remnant or transient population of Native Americans on Kent Island in the mid-18th C., and it is likely that there were occasional people passing through the area. But they were no longer viewed as an obstacle to settlement, and Kent County saw a flood of settlers move in beginning in the 1660s. This leaves us with the question of whether any descendants of the early 17th C. Native population remains, either invisible in today's population in the ICL or subsumed into other groups such as the Lenape or Nanticoke.

No-one we have talked to over the course of this project, or in earlier investigations, has given any indication that a remnant population remains within the ICL. Our consultations with the Lenape and the Delaware reveal no sense that there is an identifiable component of their

population that traces their lineage back to the area. These linkages may exist, but any melding of populations happened so long ago that no memory remains. Chief Dennis Coker (Lenape Indian Tribe of Delaware) points out that the boundaries between areas and people were to some extent fluid, with people moving even in the recent past. He pointed to the movement of many Lenape from Delaware into a more tolerant New Jersey, and also noted the movement of one Native family from Chestertown, Maryland to the Cheswold, Delaware area. How and when they found themselves in Chestertown is unknown, but this is paralleled by the move of a current Native resident of Cheswold, Delaware to that area from her birthplace on the Susquehanna River. Cheswold has a concentration of Lenape, including much of Chief Coker's family, who have been there since 1765. In his view, Cheswold was seen as a refuge for Native communities in the Chesapeake as they were collapsing in the mid-19th C. Chief Coker characterizes them today as "hiding in plain sight." With conversion to Christianity, the native names began to disappear and English names were adopted. But today, they are often unaware of their history or suspicious of those who try to talk about it. He pointed out that oral histories would now focus on growing up on the farm, perhaps interwoven with the occasional story of indigenous remedies or "casting a spell" to cure asthma. But these stories are hard to pull out, and any deep memories seem to be largely absent. In his view, this makes it very difficult to trace deeper memories, oral traditions, or distant relationships. The loss of these oral traditions began early, and he points out that there were at least six smallpox outbreaks in Delaware in the 17th C. These diseases affect all segments of a population, but the elders often are among the most vulnerable, resulting in a loss of the story tellers and wisdom keepers.

In looking to the past, Chief Coker also highlighted a story that the Moravian Lenape who left the region and ended up in Canada departed in order to keep intact their traditions, removing the most important aspects of their culture from the influence of English and colonial culture. They were "the keepers of culture and tradition, and those who stayed were keeping the connection with the land" (Coker, personal communication). He further related the legend that the two would eventually come back together, which has since happened, resulting in a cultural exchange between the Lenape Indian Tribe of Delaware and the Delaware Nation at Moraviantown (on Ontario's Thames River), fulfilling the prediction.

With regard to regional connections and the movement of people, Chief Coker emphasizes that Maryland and Delaware had an "intimate relationship." He feels that the Lenape always ranged free through our study area and were not viewed as impinging, in part simply because the resources were so abundant. Although relations were sometime strained with the Nanticoke (who were more focused on their relationship with the Powhatan), the Lenape and Nanticoke did interact and trade. In more recent times, Nanticoke elders have spoken of spending their childhood summers with the Lenape in the Cheswold area. Farther into the past, the "political boundaries" between the tribes in the northern part of the Delmarva Peninsula were not so rigid, and both the passage of peoples through another group's territory and even the use of that land often was viewed as permissible. This notion of "land use agreements" also underlay the misunderstandings with English officials and settlers who thought in term of "ownership," while Native peoples thought in terms of permission to use the land. This distinction also came through as important in our conversations with representatives

of the Nanticoke Indian Association. Ragghatha Calentine emphasized the philosophies of "use" and "stewardship," as opposed to the very foreign concept of "ownership." Both groups noted the failure of the patrilineal English to understand notions such matrilineal connections to the land. Both groups also emphasized the intimate relationship that people had with the land and the melding of the spiritual and practical connections.

These latter beliefs have deep roots and resonate strongly today. They remind us that in earlier times, the places we study had deep meaning. The river itself was a cultural phenomenon with significance, almost an entity, sometimes giving its name to people, but always giving sustenance. We have far too few of these stories or linkages, although we know that they are common among Native peoples. The meaning of a place can be spiritual and positive, such the power of *apus* or sacred mountains to Quechua peoples in the Andes, or negative, such as Native American perspectives of Mount Rushmore as a symbol of struggle, illicit occupation, or even desecration, given the sacred nature of the Black Hills to the Lakota. As Rosalyn LaPier (2017) says, as a member of the Blackfeet Nation:

> …my grandparents said that sacred areas are places set aside from human presence. They identified two overarching types of sacred place: those set aside for the divine, such as a dwelling place, and those set aside for human remembrance, such as a burial or battle site.

Some areas were off limits because people believe that human activity, or changing the landscape in such places can actually disrupt the lives of deities. But:

> … sacred places… are not always set aside from humanity's use. Some sacred places are meant for constant human interaction [and] places were not just names and stories – their landscape itself was a living sacred text.

This resonates with the work of Gallivan (2016) on the Powhatan, and these are powerful reminders of the deep meaning inherent in many places. Those of us who are so mobile and transient in the 21st C. have lost these connections to the land and to its history. But although these historical connections for our area have now been severed, that does not mean we are absolved from being mindful of the certainty that these perceptions, linkages, and spiritual connections did exist and should be recognized in the present.

CHAPTER 6
LIFEWAYS OF NATIVE PEOPLES

What was life like for Native people, especially in the project area? Because the records, both historical and archaeological, are so slender, we have to use careful analogy and comparison, drawing cautiously on nearby areas that have a fuller record. Clark (2019) traces the development of villages and social structure in the region, beginning with the Montgomery complex, from 1000-1400 AD. During this period on the western side of the Chesapeake Bay, semi-sedentary villages are visible archaeologically, with circular winter lodges that housed families who stayed behind when others moved to winter hunting grounds and long houses (22-44 ft long). The houses were organized around a central plaza or meeting and work area, with a communal storage pit for feed stock (new pits were dug every 3-5 years), and burials that were placed between the palisade walls and houses.

Early Patterns

The Montgomery Complex evolved into the Potomac Creek Complex (with varying hypotheses as to the role of migration and sources of new infusions of peoples and ideas). Several shifts in culture can be observed, including above-ground food storage, ossuary burials in ceremonial burial grounds, and the beginning of tribute or tithes paid to a werowance or Tayac (Clark 2019:205). These chiefdoms and other cultures on the western side of the Chesapeake had a subsistence base utilizing swidden horticulture, hunting and gathering, and fishing that relied upon weirs and exploitation of spawning fish runs. To these resources were added the abundant plant foods found in estuarine waters and elsewhere. This pattern offers some useful comparisons for reconstructing subsistence patterns and village layout on the project area, albeit with caveats: it seems certain that the people in the Chester (and perhaps Sassafras) watersheds relied on oysters to an extent not seen in the Potomac Creek complex, and the degree to which maize was used on the upper Eastern Shore is far from clear.

Clark (2019) notes that the Powhatan and Piscataway used three types of settlements, aligned with seasonal subsistence rounds: palisaded, semi-permanent villages, sometimes palisaded; communal and extended family hunting camps occupied during the winter; and fishing quarters utilized in the spring and summer.

Semi-permanent Villages

Semi-permanent villages seem to have been a central node from which various movements of people took place, according to the season. With a relatively small number of houses, either nucleated within a palisade (Figure 5.3) or in a somewhat dispersed pattern (Figure 6.1), they retained a small permanent population year-round, while segments of the population would leave and then return. In the fall (September to November), the bulk of the

population lived there and harvested crops from nearby fields and nuts from wooded areas. These surpluses were stored, offering a means to raise carrying capacity and feed the populations during times of scarcity. Autumn feasts celebrating the harvest and change of season were held in the village. In late November through the winter, deer drives and other hunting was the focus, with groups moving out to find game and living in hunting quarters (see below). In the spring, they rejoined the larger village and prepared fields for planting, and in mid-June, the group split again, with some remaining to care for crops, while others ranged more widely, fishing, hunting, and foraging.

In these semi-permanent villages, the Powhatan favored longhouses of varying sizes and shapes, but insufficient evidence exists to posit Piscataway practice (Clark 2019:207-208). Clark (2019:208) quotes an anonymous English visitor to a Yaocomoco village in 1634 as saying:

> Their houses are made like our arbores, covered some with mats, other with bark of trees, which defend them from injury of the weather: the fires are in the midst of the house, and a hole in the top for the smoke to go out at. In length some of them are 20, others 40, some a 100 feet; and in breadth about 12 feet.

John Smith (1986:161-162) confirms these details and offers additional information:

> Their buildings and habitations are for the most part by the rivers and not farre distant from some fresh spring. Their houses are built like our Arbors of small springs [saplings] bowed and tyed, and so close covered with mats, or the barkes of trees very handsomely, that notwithstanding either winde, raine or weather, they are as warme as stooves, but very smoaky, yet at the toppe of the house there is a hole made for the smoake to goe into right over the fire.
>
> Against the fire they lie on little hurdles of Reedes covered with a mat borne from the ground a foote or more by a hurdle of wood. On these round about the house they lie heads and points by one another against the fire, some covered with mats, some with skins, and some starke naked lie on the ground, from 6 to 20 in a house. Their houses are in the midst of their fields and gardens which are small plots of ground. Some 20 [acres], some 40. some 100. some 200. Some more, some lesse, some times from 2 to 100 of those houses together, but separated by groves of trees. Neare their habitations is little small wood or old trees on the ground by reason of their burning them for fire. So that a man may gallop a horse amongst these woods any waie, but where creekes and Rivers shall hinder.

Figure 6.1. "Indian Village of Secotan." John White (1585). (John White Drawings, Virtual Jamestown, The Institute for Advanced Technology in the Humanities, University of Virginia; http://www.virtualjamestown.org/images/white_debry_html/white35.html)

Clark (2019: 208) divides these semi-permanent settlements into villages and smaller hamlets, both of which were used long-term, through multiple generations, as evidenced by periodic rebuilding. Other villages show no archaeological traces of rebuilding and must have been used for a single generation. Villages were larger and usually palisaded, while hamlets were smaller, more dispersed, and unpalisaded, with houses dispersed among the cultivated fields. Of course, palisades can also be an indicator of the need for defense, as opposed to the size of the village, perhaps as seen at Tockwogh. Clark (2019:211) discusses the methods of palisading, based on period accounts, and the vertical pales were clad with bark and in some

instances wattle, with or without daub. In some large villages with a need for serious defense, three concentric palisades were erected.

These villages and hamlets typically were adjacent to springs or other sources of fresh water (some of which have dried up today), and were generally on high ground along rivers or larger tributaries. Using hill-and-hoe techniques to plant in a mixed manner, they also killed the trees in these fields by stripping the bark and thereby defoliating without having to cut the trees down right away. Drawing on Rountree (1989) and Clark (2019) we know that in the Powhatan area each village planted fields ranging from 20-200 acres, containing maize, squash and beans. Hamlets had family gardens mixed in with their housing, growing not only food stuffs like maize and squash, but tobacco and sunflowers. Other cultigens included little barley (*Hordeum pusillum*) and *Chenopodium* (Rountree and Davidson 1997).

In other parts of the Chesapeake and in other Indigenous Cultural Landscapes, soils conducive to the cultivation of maize have been an important variable in determining settlements patterns, as they are so closely associated with villages. There are different ways to approach the question of what soil types would have been sought after by Native women in planting corn. Rountree *et al*. (2007:47) simply define these as soils that "are level or nearly so, fine-grained but easy to till, well-drained but not too dry, and possessing a low winter water table, a characteristic that allowed them to warm up quickly in the spring." Their assessment of these soils for our area are shown in Figure 6.3. On the other hand, Strickland *et al*. (2016, 2017) define these as soils capable of procuring 160 bushels per acres. The National Park Service's ICL criteria (2011) and the Request for Proposals for the current project define these soils as "fine sandy loam, 1-2% grade."

Figure 6.2. "Indian Man and Woman Eating." John White (1585). (John White Drawings, Virtual Jamestown, The Institute for Advanced University of Virginia; Technology in the Humanities, http://www.virtualjamestown.org/images/white_debry_html/white40.html)

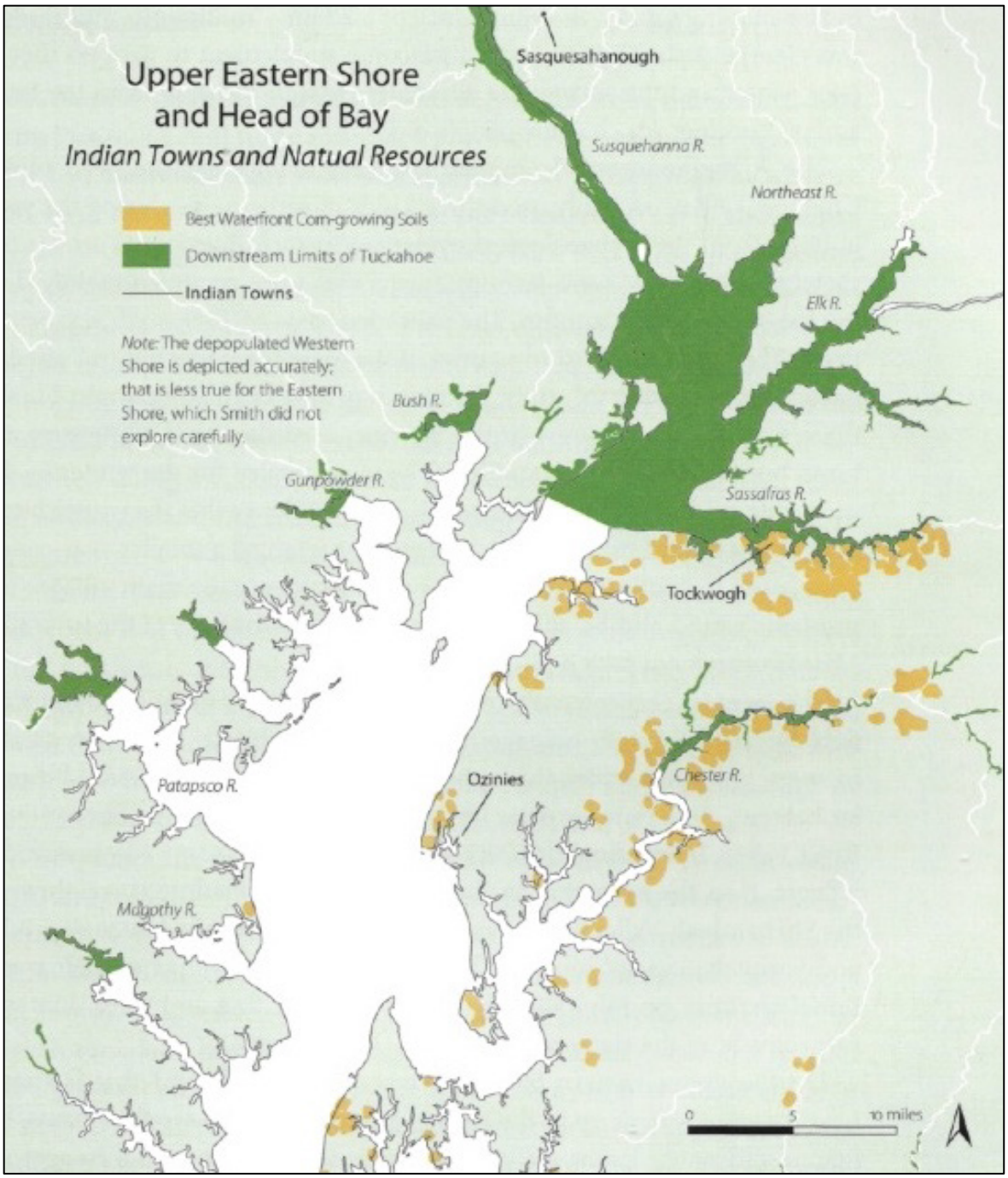


Figure 6.3. Maize soils and tuckahoe distribution, Upper Eastern Shore (Rountree *et al*. 2007:233)

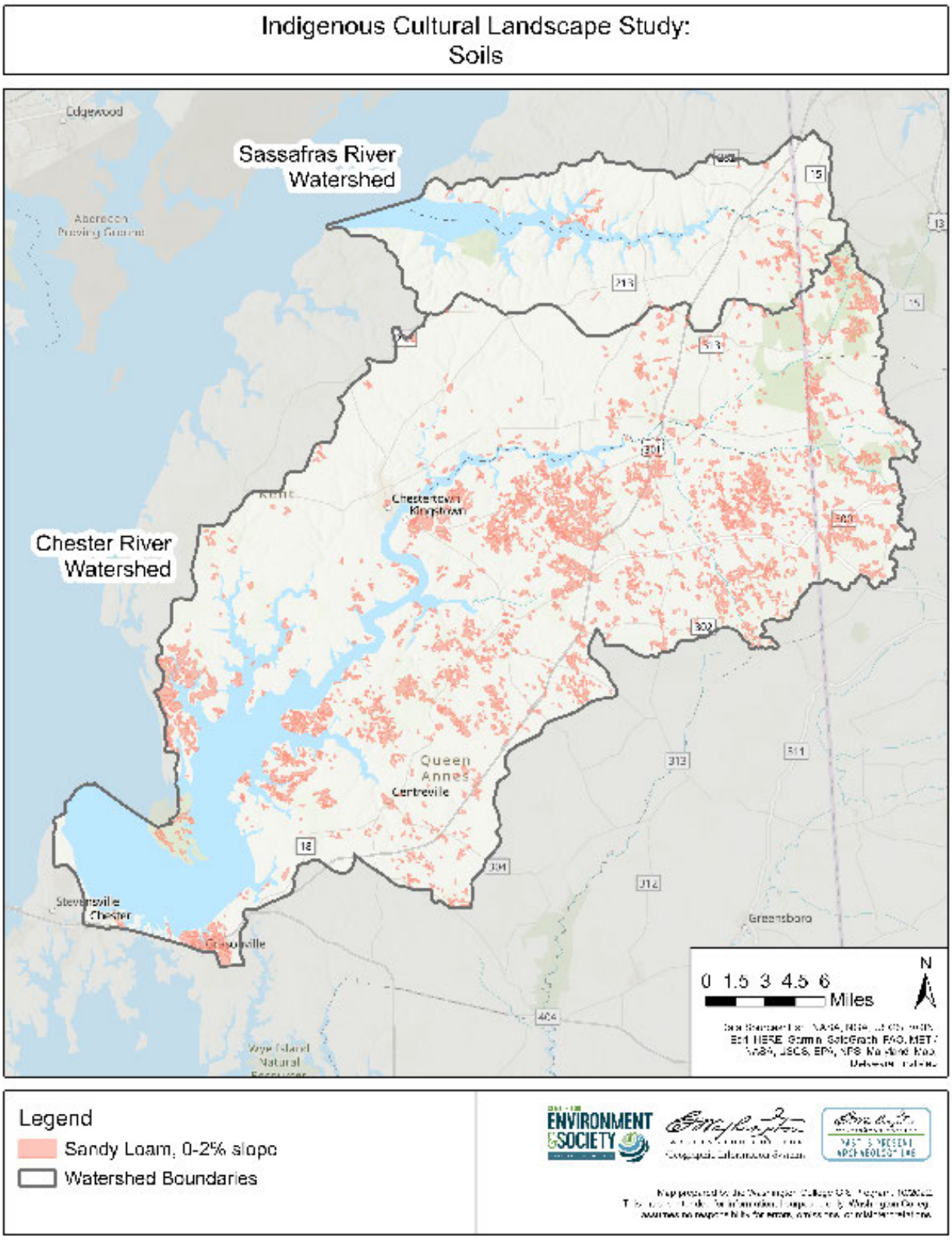


Figure 6.4. Sandy loam soils, 0-2% slope (per NPS ICL criteria)

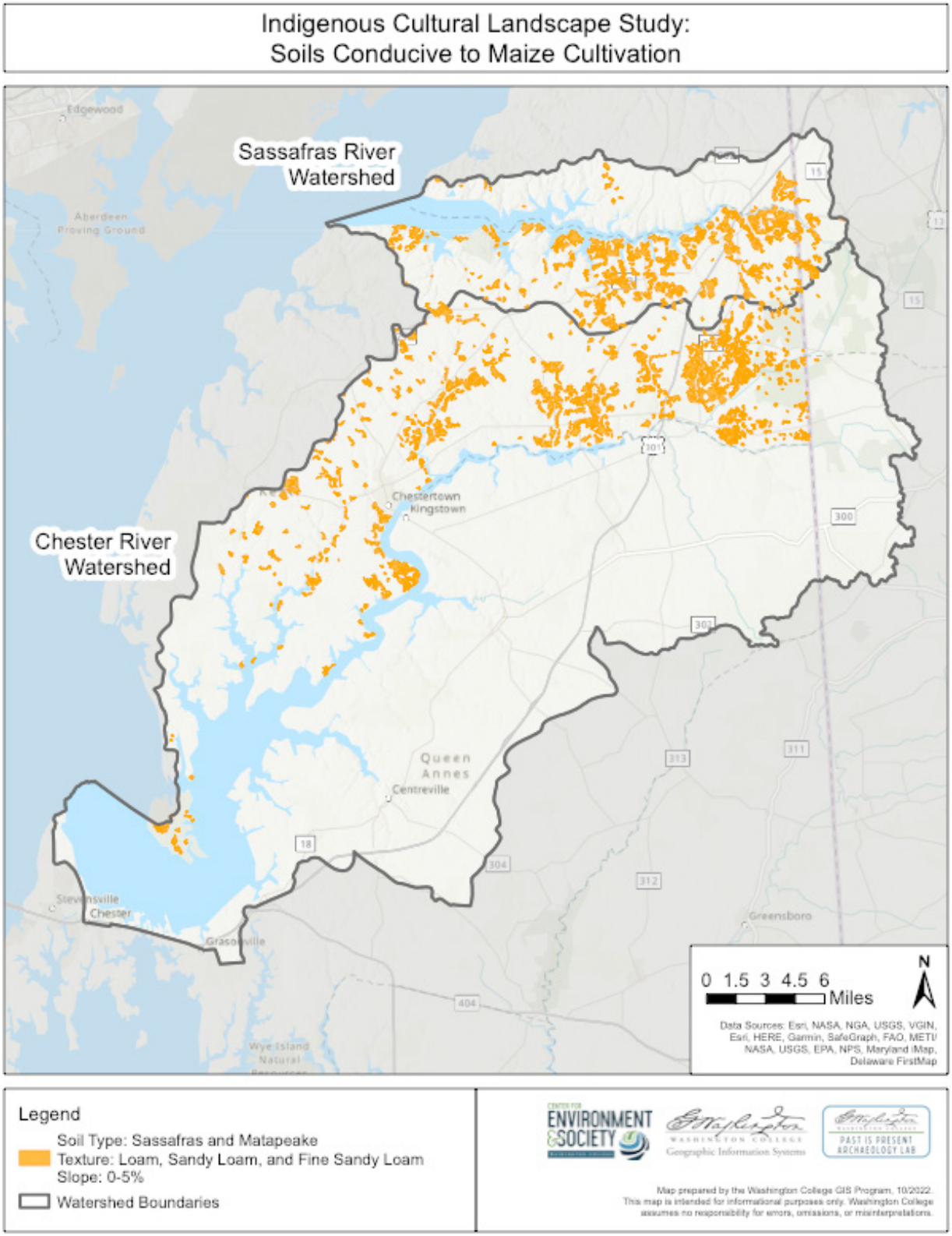


Figure 6.5. Sassafras and Matapeake Soils – loam, sandy loam, and fine sandy loan, with 0-5% slope (no soils of this type are mapped in Queen Anne's County)

Figure 6.4 depicts soils that are sandy loam with 0-2% slope, differing slightly from NPS ICL criteria, which calls for 1-2% slope, but including Rountree *et al*.'s (2007) stipulation of level soils. Figure 6.5 depicts Sassafras and Matapeake soils comprised of loam, sandy loam, and fine sandy loan, with 0-5% slope, as these are considered compatible with corn cultivation in the project area. None of these soils are mapped for Queen Anne's County, reducing the utility of this map for the southern portion of the study area.

Again, it is not clear that Native peoples on the upper Eastern Shore, such as the Ozinies and Tockwogh, relied on maize (Rountree and Davidson 1997), as there simply is no archaeological evidence one way or the other. Certainly the abundance of natural resources and smaller reported populations would have reduced the need for this as a staple food stuff.

Rountree *et al*. (2007) note that none of the three major crops (maize, squash, and beans) are native to the region, nor is tobacco, so they were vulnerable to dry summers (every three years or so) and more severe droughts. Insects always were a threat, as were early frosts. Women, who were the keepers of this knowledge, sought soils that warmed early in the spring, in order to ensure a long enough growing season for crops that had been selected for but had their origins in warmer parts of North America. Rountree *et al*. (2007:33) also point to the declining fertility of fields, insect infestations, and other factors that contributed to the shifting location of towns over time – they "would move, amoebalike, up and down the banks of waterways. Even densely built palisaded towns…would be moved at intervals of perhaps twenty years. All that movement means that John Smith's map, as originally sketched in 1608, is a snapshot in time."

Hunting Quarters

Clark (2019:217-218) notes that Henry Spelman (1613:cvi-cvii) stayed at Paspatanzie, one of the outlying hamlets in the Potomac Creek drainage, and he provides the best account of Potomac Creek complex chiefdom's deer drives and the winter hunting quarters (Haile 1998:487–488, quoted in Clark 2019:217):

> But in that time when they go a-hunting the women goes to a place appointed before to build houses for their husbands to lie in at night, carrying mats with them to cover their houses withal. And as the men goes further a-hunting, the women [goes before] follows to make houses, always carrying their mats with them. Their manner of their hunting is this: [where] they meet sum 2 or 300 together, and having their bows and arrows and every one with a fire-stick in their hand they beset a great thicket round about. Which done, every one set fire on the rank grass [and] which the Deer seeing fleeth from the fire. And the men, coming in by a little and little, encloseth their game in a narrow room, so as with their bows and arrows

> they kill them at their pleasure, taking their skins, which is the greatest thing they desire, and some flesh for their provision.

In the project area, the number of individuals involved certainly would have been smaller, and not all hunting was done using fire as a driver. Where fire was used, this no doubt contributed to the maintenance of grasslands and savanna. Some period observers said that these hunting grounds were located at the headwaters of rivers, often 3-4 days away from the main village; this allowed them to move into areas where game were less hunted and therefore less wary (Clark 2019:218). This approach to hunting appears to have continued wherever possible well into the 17th C., often with two or three men and their families forming a cooperative group. John Smith (1986:164-165) offers additional details:

> They also use to drive them into some narrowe point of land; when they find that advantage and so force them into the river where with their boats they have Ambuscadoes to kill them. When they have shot a Dear by land, they follow him like blood hounds by the blood and straine and oftentimes so take them. Hares Partridges, Turkies, or Egges [geese?], fat or leane young or old, they devour all they can catch in their power…
>
> One Savage hunting alone, useth the skinne of a Dear slit on the one side, and so put on his arme, through the neck, so that his hand comes out to the head which is stuffed, and the hornes, head, eies, eares, and every part as artificially counterfeited as they can devise. Thus shrowding his body in the skinne by stalking he approacheth the Deare, creeping on the ground from one tree to another. If the Deare chance to find fault, or stand at gaze, he turneth the head with his hand to his best advantage to seeme like a Deare, also gazing and licking himself. So watching his best advantage to approach, having shot him, he chaseth him by his blood and strain till he get him.

Waterfowling was another important activity during the winter, offering an abundant source of food. Geese and some species of ducks sought shallow water, making them game that could be shot from land or possibly from camouflaged canoes (there are no accounts of the latter). It also is likely that Native peoples used decoys to draw in their quarry. Tule reed duck decoys have been found in Lovelock Cave, Nevada, due to the dry context and excellent preservation. Some were made with bird heads and skins that were stuffed or mounted on sticks or attached to floats, while others were complete birds fashioned from dried bulrush, "clearly depicting canvasback ducks, the best eating of all American wildfowl" (Shaw 1974). Decoys like these have not been recovered from the Chesapeake, but it is likely that something similar was crafted and used to bring waterfowl within reach of hunters.

Summer Quarters – Fishing and Aquatic Resource Gathering

As the winter dragged on and stores of food gradually were depleted, people looked forward to warmer weather and a shift in subsistence strategy. This was to move into fishing quarters along the rivers or Bay margins (see previous sections of this report for species).

John Smith (1986:163-164) again provides details on how fishing was pursued. After noting that bows and arrow were used not only for hunting and warfare, but for fishing, he says:

> Their fishing is much in Boats. These they make of one tree by bowing and scratching away the coles with stons and shels till they have made it in a form of a Trough. Some of them are an elne [an "elle," or 45 inches] deepe, and 40 and 50 foot in length and some will beare 40 men, but most ordinary are smaller and will beare 10, 20, or 30, according to their bigness. Insteed of oares, they use paddles and sticks with which they will row faster then our Barges. Betwixt their hands and thighs, the women use to spin, the barks of trees, deear sinews, or a kind of grasse they call *Pemmenaw*, of these they make a thred very even and readily. This thred serveth for many uses: As about ther housing, apparel, as also they make nets for fishing, for the quantity as formally braded as ours. They make also with it lines for angles. Their hookes are either a bone grated as they nock their arrows in the form of a crooked pinne or fishhook or of the splinter of a bone tied to the cleft of a litle stick, and with the ende of the line wherewith they shoote at fish in the rivers. But they of the Accawmack use staves like unto javelins Headed with bone. With these they dart fish swimming in the water. They also have many artificiall weares in which they get abundance of fish.

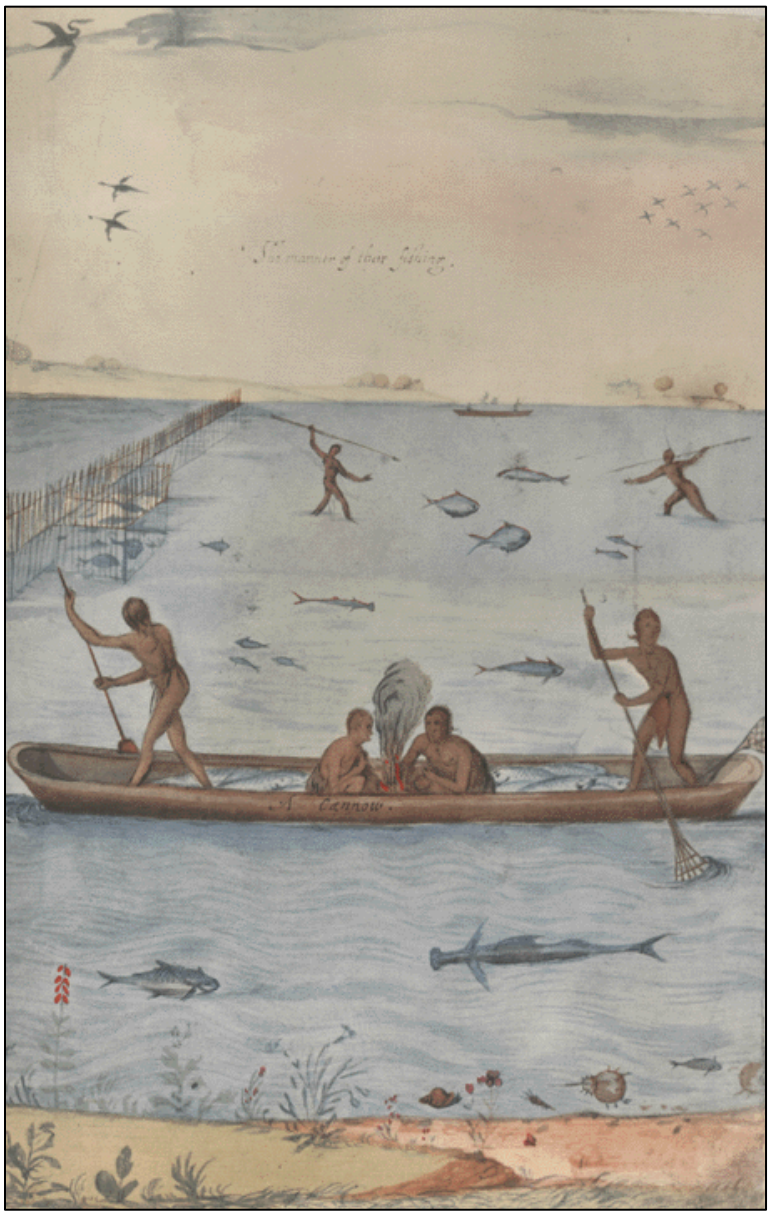


Figure 6.6. “Indians Fishing.” John White (1585). (John White Drawings, Virtual Jamestown, The Institute for Advanced Technology in the Humanities, University of Virginia; http://www.virtualjamestown.org/images/white_debry_html/white42.html)

Smith (1986:162-163) also makes it clear that there was more to spring and summer subsistence than fishing:

> In March and Aprill they live much on their fishing weares, and feed on fish, Turkies and squirrels. In May and June they plant their fieldes and live most of Acornees, walnuts, and fish. But to mend their diet, some disperse themselves in small companies and live upon fish, beasts, crabs, oysters, land Torteyses, strawberries, mulberries, and such like. In June, Julie, and

> August they feed upon the roots of *Tockwough* berries, fish and greene wheat. It is strange to see how their bodies alter with their diet, even as the deare and wilde beasts they seeme fat and leane, strong and weak.

Spring would have been the leanest time, but foods throughout the year were low in sugar and fat, but high in fiber; "what varied seasonally was energy-rich starch" (Rountree *et al*. 2007:30).

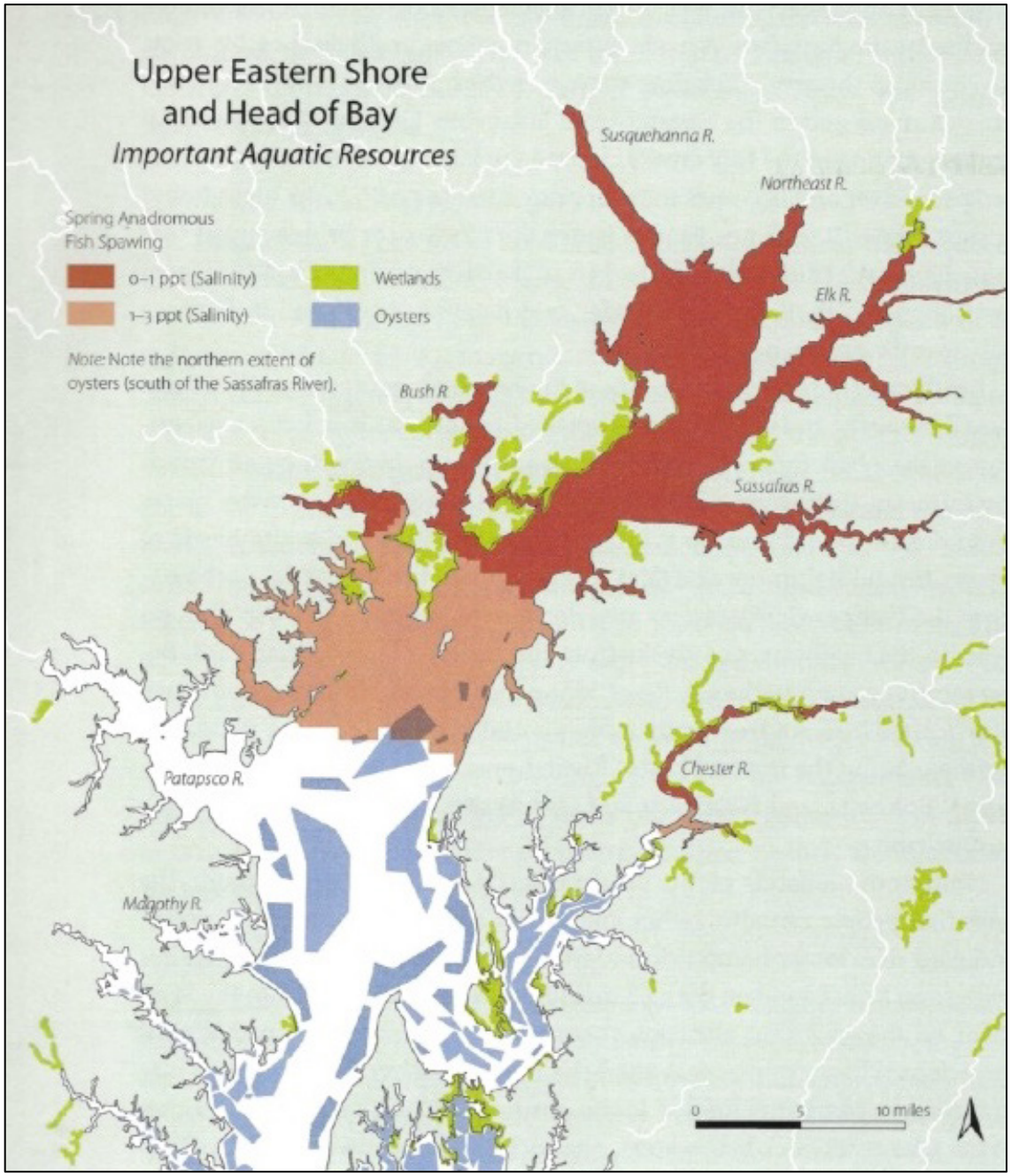


Figure 6.7. Aquatic resources and salinity in the Upper Bay (Rountree *et al*. 2007:226)

The Edible Landscape

In addition to cultivated food sources, the importance of which is uncertain for the project area, a wide range of some 1,100 other native plant species grow wild and were collected for food, and for medicinal and other purposes. One of the better known plants is arrow arum (Peltandra virginica), which not only offered a tuber from which flour and bread could be made, but fruit that could be cooked like peas. The tubers, however, contain needles or raphides of calcium oxylate that are toxic and when ingested can cause a burning sensation in the mouth, vomiting, severe diarrhea, difficulty in swallowing and, sometimes, loss of speech and impairment of the airway (Murray 1996). Through experimentation and creativity, Native peoples had determined that heat would destroy the raphides, and Smith (1986:153-154) described the process in an oft-quoted passage:

> The chiefe roote they have for foode is called *Tockawaghe*, It growth like a flagge in low muddy freshes. In one day a Savage will gather sufficient for a weeke. These rootes are much of the greatnes and taste of Potatoes. They use to cover a great many of them with oke leaves and ferne, and then cover all with earth in the manner of a colepit; over it, on each side, they continue a great fire 24 houres before they dare eat it. Raw it is no better than poison, and being roasted, except it be tender and heat abated, or sliced and dried in the sun, mixed with sorrel and meale or such like, it will prickle and torment the throat extreamely, and yet in sommer they use this for bread.

Smith and others list a number of other native plants, but the most comprehensive listing is in Appendix C of Rountree and Davidson (1996), and an illustration from Rountree *et al*. (2007) shows a cross-section of a river valley that provides a wonderful insight into where various plants and other resources were to be found (Figure 6.8).

Following the graphic in Figure 6.8, there were different zones or ecotones used by Native peoples. On higher ground, and along the margins of streams, the forests in the area were mixed deciduous growth that included nut-producing trees like oak (acorns) hickory, walnuts, chestnuts, beechnuts hazelnuts, and chinquapin. These attracted animals (turkey, bears, racoons, opossum) that became game for the stew pot, while nuts offered people a food that was more durable and could be stored for longer periods of time than more perishable materials. These offered a cushion against seasons of scarcity.

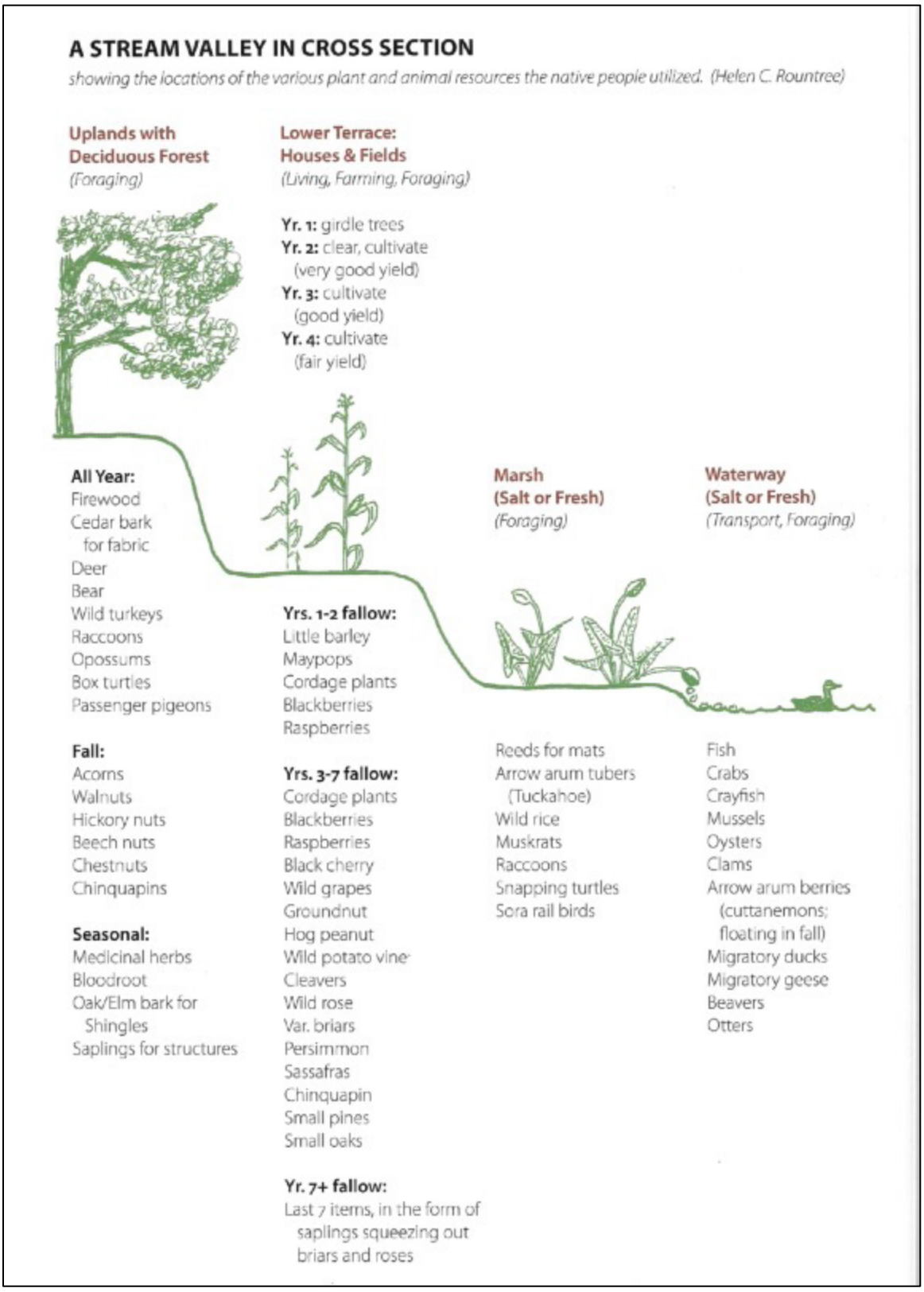


Figure 6.8. Stream valley in cross-section (from Rountree *et al.* 2007:31).

Terraces in drainage areas were a prime location for horticultural fields. These fields were continually being cleared by men, utilized for a period of a few years by women, and then allowed to lie fallow to rejuvenate. Trees were initially girdled, or stripped of bark around the circumference to interrupt the flow of nutrients and kill the tree. The eventual loss of trees opened the way for planting a year later, and trees could be removed at leisure. The crops from the first two years after girdling would provide good yields, but the harvest generally would be reduced by the third year, prompting the abandonment of the field after that. Once abandoned, a field would go through successive stages of regrowth, offering a wide and changing range of wild foods in the process. These included plants that supplied material for cordage, grains that could be used for bread, such as little barley (called *mattoume* by the Powhatan), as well as greens like wild lettuce and wild plantain. In time, wild berries would flourish, including blackberries and raspberries that attracted not only humans, but raccoons and opossums (Rountree *et al*. 2007:47).

Fresh and salt-water marshes provided another important set of wild resources. Tuckahoe has already been discussed, but other plants provided useful tubers. Abundant along the Sassafras River today is *Nelumbo lutea*, or American lotus. This marginal aquatic perennial has umbrella-like leaves that measure 2 ft (60 cm) across, with luminescent yellow flowers that are up to 12 inches (30- cm) across. Although not mentioned by Rountree *et al*. (1997 Appendix C), the Native American Ethnobotany Database (n.d.) documents its use by a variety of Native peoples. The Ojibwa, for example, used many parts of the plant. The hard, chestnut-like seeds were roasted and made into a sweet meal, while the shoots were cooked with venison, corn or beans. “The terminal shoots were cut away from the ends of the underground, creeping rootstock and the remainder is their potato. These shoots are similar in shape and size to a banana, and form the starchy storage reservoirs for future growth. They have pores inside, but have more substance to them than the stems. They are cut crosswise and strung upon basswood strings, to hang from the rafters for winter use.” (Native American Ethnobotany Database (n.d.), quoting Smith 1932:407). The Huron used the roots with acorns during famine, while the Dakota cracked the seeds and used with meat to make soup. They also peeled the tubers and cooked them with meat or hominy. They believed that the plant had mystic powers. The American lotus was also used by the Meswaki, Omaha, Pawnee, Comanche, Ponca, Potowatomi, and Winnebago. It almost certainly would have been used in the Chesapeake, as well.

Marshes also offered grain from wild rice and tidal marsh amaranth. Reeds provided materials for matts, while a variety of small animals could be found along the margins, including turtle, raccoons, muskrats and some species of birds. In amongst marshes were spots of high ground, hammock or hummocks, that supported food-producing trees, as well as higher ground along the margins. Rountree *et al*. (2007) characterize freshwater marshes as the real “breadbaskets” of the region, offering the starchy seeds and tubers that were the basis for bread. They note additional plants, such as pickerel weed and spatter dock (cow lily). Of particular importance were marshes of at least 10 acres (4 hectares), containing at least 30 percent wild rice or 50 percent tuckahoe or spatterdock (Rountree *et al*. 2007:51).

It is important to remember that wetlands are found not only along the margins of streams, but also inland. In the eastern part of the project area are topographic features known as Delmarva Bays or basins. These elliptical depressions, surrounded by sandy ridges, are seasonal wetlands. Today, most have been drained and leveled through agricultural activity, but a significant number remain in eastern Kent and Queen Anne's Counties, Maryland. LiDAR survey has shown that they were once far more abundant, stretching throughout much of the interiors of the middle Eastern Shore (Fenstermacher *et al*. 2014; see also Figure 6.9).

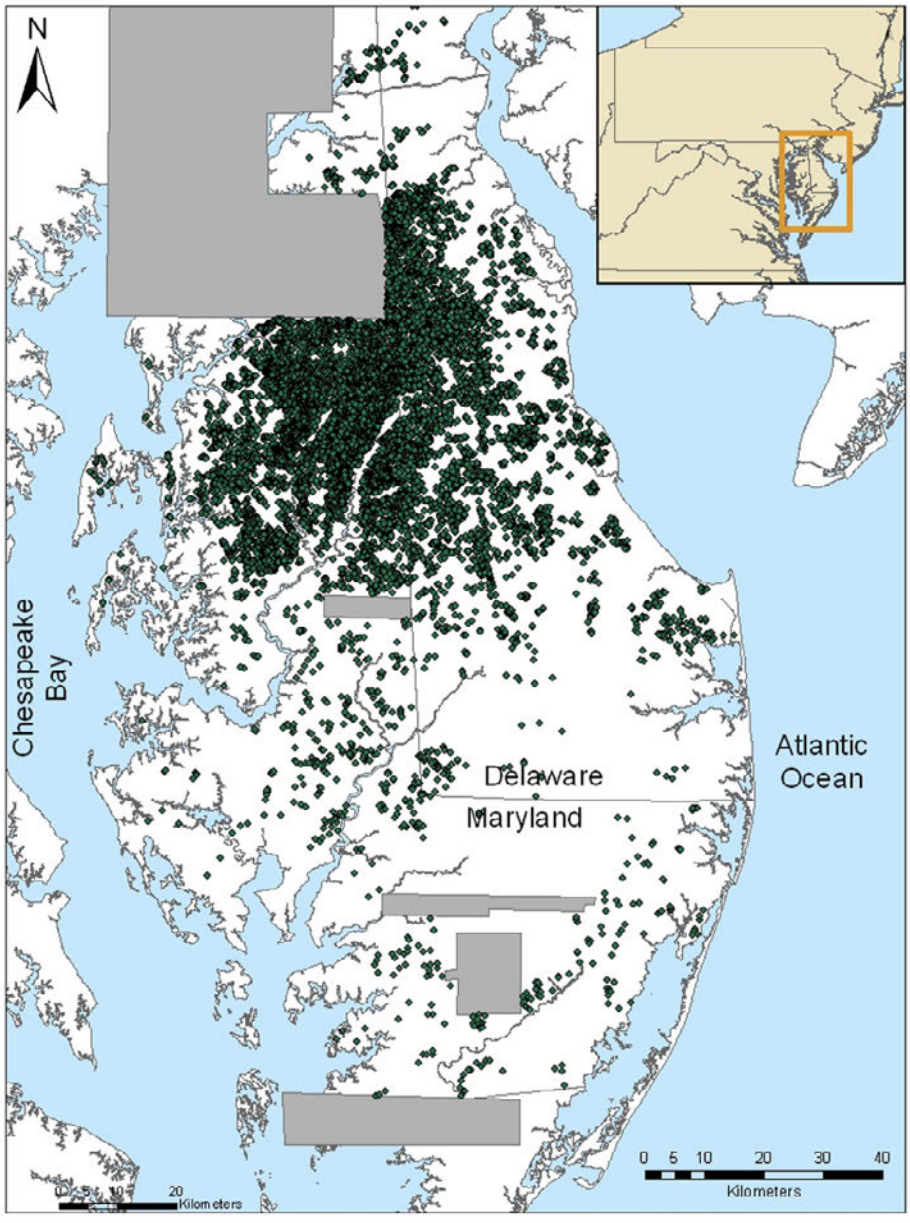


Figure 6.9. Map showing Delmarva Basins based on LiDAR imagery. Areas in gray are zones where LiDAR data were not available (from Fenstermacher *et al*. 2014: Figure 1).

Archaeological surveys have shown that these features were highly attractive to Native Americans as they offered such a diversity of plant and animal life, so much so that they are an important component in archaeological predictive modeling in the region (Seidel *et al*. 2004; Seidel 2007; Seidel and Lowery 2008).

As we move to the last portion of Figure 6.8, salt and fresh waterways offered their own range of resources, many of which have already been discussed. These include a variety of fish and shellfish (oysters, mussels, clams), crayfish, crabs, waterfowl, otters, beaver, and more.

Although the descriptions above are derived from descriptions of Algonquians in other parts of the Chesapeake Bay region, by analogy it is reasonable to expect that the peoples in our project area had adaptations that were very similar.

The Landscape of Travel & Trade

While people moved between the different ecotones and topographic zones reviewed in the previous section, they also ranged over much longer distances, seeking trade and other relationships with groups of people in adjoining and more distant areas. The importance of trade and its networks are hard to over-emphasize, and it was pursued at various levels.

First, trade occurred at the local level, between people in adjacent territories. A group with access to marine resources from a salt-water area might not have access to the prolific, starchy plants like tuckahoe that required less saline waters, and so they might trade for it with neighbors in close-by freshwater areas. People who had over-hunted deer or lived in a constricted area that reduced the hunting opportunities for larger game might trade for those foods. As Rountree *et al*. (2007:42) point out, for most Native peoples the critical element of trade, and indeed everyday life, was providing food – and food was accounted as wealth. Although the bulk of it came from the immediate vicinity, diet could be supplemented and made more varied through local trade.

A corollary of trade was the importance of gift exchange among Algonquian peoples. Giving gifts helps to establish social relationships, and one was free to accept or reject a gift. Acceptance meant that not only was the gift accepted, but the social relationship was acknowledged. Reciprocation was then expected, demonstrating a mutual feeling of good faith and respect. On the other hand, rejection of a gift meant the rejection of a social relationship that was sought by another, with negative consequences. Too often, European colonists failed to understand this, and that failure could lead to misconstrued intentions and possibly to violence. (Gallivan 2016:38)

Although local trading might concentrate on food, trade over longer distances involved what were considered luxury or exotic items that had intrinsic value to people. These goods included marine shells and jewelry from the Atlantic coast and higher salinity areas in the lower Chesapeake Bay, freshwater pearls from streams, copper from the Great Lakes area and

perhaps parts of New Jersey, and dye-stuffs, such as puccoon (a root that produced a red dye) from the Carolina Piedmont (Rountree and Davidson 1997; Rountree *et al*. 2007; Gallivan 2016; Clark 2019). These goods were important well before the arrival of Europeans, and their significance continued into the historic period. They also moved over long distances, not usually by long-distance traders (although some Native people occasionally appeared far from home), but rather by hopping from person-to-person and group-to-group, traveling over many hundreds of miles. Marine shell was prized far into the interior of North America, and a two-way, complex flow of goods was well-established by the time Jamestown was settled.

As Europeans came onto the scene, they also became a source for some valued items. Copper from kettles or other implements was prized, not necessarily for the utilitarian purposes for which they were made, but also because they could be cut into the material for jewelry, pipes, or other objects. Gallivan (2016) has shown that copper excavated from Werowocomoco can be chemically sourced to Jamestown, offering an early example of this exchange. Glass beads also were sought after by Native peoples, but not to the exclusion of the shell beads that had become so important over centuries of trade and exchange. Also sought after by Indians were firearms, alcohol, and some finished goods such as shirts, matchcoats, or steel tools.

What Native peoples could offer in exchange for European goods included food, which was critical in the early years, as the English sought to gain a foothold in a new environment, and furs. The fur trade was especially important, across the entire region. In the north, William Claiborne sought access to furs from the interior through trade with the Susquehannock. The Susquehannock were in competition with the Iroquois League for access to furs, leading to a 1661 alliance between the English and the Susquehannock against the Iroquois League (Rountree and Davidson 1997). Furs also came from the interior of the Eastern Shore, with some interesting consequences. English traders sought to preserve their access to this trade, which necessitated insuring that Native peoples had continued access to the lands that provided these pelts. Encroachment by settlers was seen by these traders as a serious threat, so they went to some lengths to patent these lands and thus protect them. An early example was the 1665 patenting of land at the Locust Neck Indian Town, on the Choptank River, by fur trader John Edmondson. This was one of the villages of the Choptank Indians, and by securing the patent for land on which he had no intention of living, he ensured that those who supplied his furs would remain undisturbed. Indeed, along with other lands in the area patented by other traders, this became part of the later Choptank Reservation (Rountree and Davidson 1997). This obviously did not happen in the upper Chesapeake of our project area, but it nonetheless highlights the importance of the fur trade well past the mid-17th C. and the complex relationships between the English and Native peoples in trade and land rights.

Other trade goods moving into Native hands included glass bottles, cloth, and ammunition. Moving in the other direction, to the English flowed native-made bowls and woven baskets, mats, and pipes. Cloth and metal tools seem to have been particularly important to Indians, but the balance of trade allowed them reasonable access to such goods. According to Rountree and Davidson (1997), although Native peoples sought these products, they by no means relinquished their traditional material culture or their values and ways of life.

Instead, they adapted enough to deal with the reality of these newcomers and to improve their own situation, while holding onto tradition. As an example, Rountree and Davidson (1997:138-139) cite the 1706 case of Machicopah, a Pocomoke Indian whose house was burned by the English, injuring his wife in the process. A complaint was made by the tribe, seeking compensation for goods lost in the dwelling, which were listed. These included a gun, three brass kettles, a shirt, and a blanket, all of English origin. Other items likely were indigenous: 27 arm's lengths of Roanoke, two Indian belts, four Indian baskets, six round mats, 20 bowls, a doeskin, 10 bushels of corn, and two bushels of dry roasted ears of corn. This gives a sense of how material goods from two cultures were melded in these households. It also points to the continued importance of shell beads, which often were used in barter and trade into the 18th C.

How did these goods move around the landscape? It is a truism that travel on the Chesapeake hewed to the water. In a land so heavily dissected by wide rivers and a multitude of streams, the shortest distance between two points often was over the water, in dugout canoes. But a surprising amount of traffic also took place over land, sometimes by necessity. Given the importance of marine shell, there was a good deal of traffic east to west across the Delmarva peninsula. The simplest path was by water up the creeks of the Delaware side, across the land separating the headwaters of those creeks and rivers (essentially a portage), to the headwaters of those streams running into the Chesapeake, and then downstream to the Bay. We have already seen one of these pathways in Danckaert's journal, where he described a route from the Apoquemene (Appoquenimink) Creek in the east to the Bohemia River in the west (Figure 6.10).

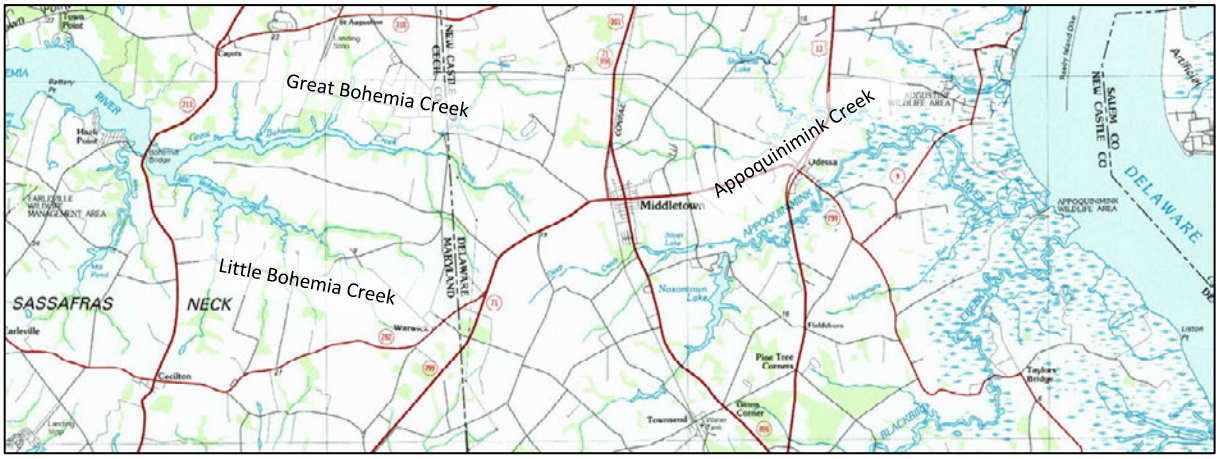


Figure 6.10. Area between the Bohemia River and Appoquinimink Creek (extracted from USGS Dover, DE 30x60 Minute Quadrangle, 1984)

Similar passages could be made between the Sassafras River and Blackbird Creek to the east, and from the Chester, via its upstream branches of Cypress Creek and Sewell Branch (called "Wickomis" or "Wicomiss" branch in the 1670s [Marye 1938b:151]; Figure 6.11), to Mill Creek and the Leipsic River in the east (Figure 6.12). The course of these streams is largely the

same as they were centuries ago, but they have been transformed by the installation of dams and siltation from farming. It is hard to determine just how far upstream it would have been possible to travel by canoe on any one of these streams in the prehistoric or early historic periods, but whatever the upstream limits, using them would have served to shorten distances and lighten loads – it was far easier to transport goods by water than it was on foot.

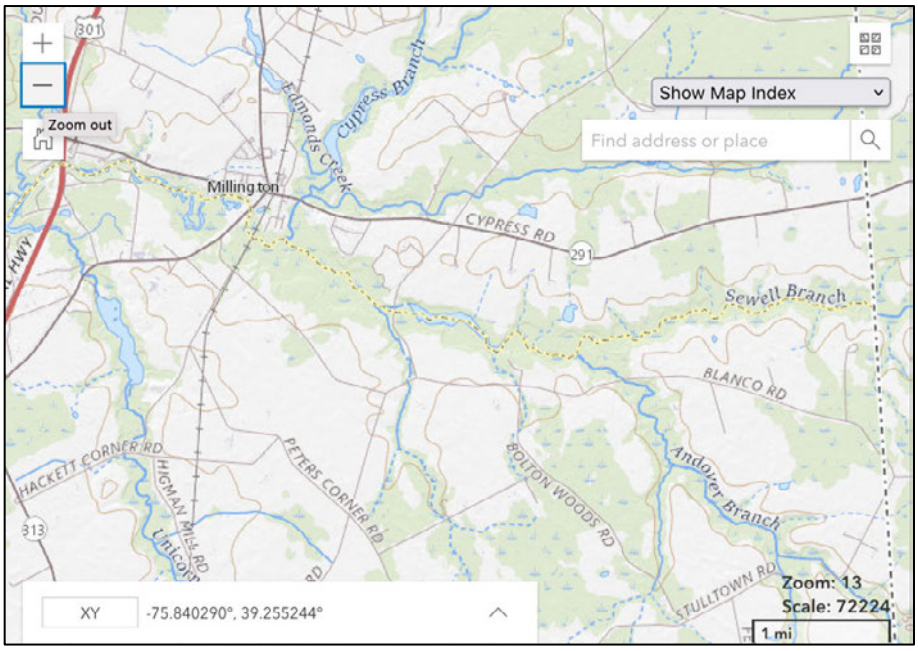


Figure 6.11. The headwaters of the Chester River.

Figure 6.12. Area between the Chester and Sassafras Rivers and Delaware tributaries (extracted from USGS Dover, DE 30x60 Minute Quadrangle, 1984)

Other trails moved north-south. Logic suggests that these paths often followed the spine of high land that forms the divide between the Chesapeake and Delaware watersheds, but this was not always the most convenient or easiest route. William B. Marye (1936a, 1936b, 1937, 1938a) spent an extraordinary amount of time poring over land records and other sources, trying to tease apart these Indian paths. He noted that four rivers, the Pocomoke, Nanticoke, Choptank, and Chester, presented obstacles in the way of overland travel from the more densely populated southwestern portions of the Delmarva to the north (Marye 1936a:5). If these obstacles could not be avoided, then paths had to seek shallow fords in the upstream reaches. However, he often found himself frustrated, saying "we can sometimes assert that a certain path connected two known points, but precisely how it got from one to the other we cannot undertake to tell" (Marye 1936a:6).

Marye (1936a:7-8) highlighted the Old Choptank Trail or Delaware Path as a major north-south route. It led from Newcastle, Delaware southwest to the Indian towns of the Choptank and Nanticoke on the southwestern Delmarva. In the north, Marye felt that this route crossed a ford at the head of the Elk River, and then crossed fords on the Bohemia, Sassafras, and Chester Rivers. After crossing the Chester, the path merged with a trail coming out of Talbot County that led from the south across to Delaware's St. Jones Creek and a settlement called Pockety. "St. Jones Creek" is now Delaware's St. Jones River, which runs southeast through present-day Dover and empties into the Delaware just above Murderkill. South of the divergence of these two paths (the Choptank Path and the trail leading to Pockety), Marye places the crossing of the Choptank River at Gravelly Branch, about two miles above present-day Greensboro, in Caroline County, Maryland.

With regard to the fords where the Choptank Path might have crossed through our project area, Marye does not offer an opinion on where the ford on the Sassafras would been located, but posited two possibilities for the Chester (Marye 1936b:5). The first of these is what he refers to as the "Lower Ford," located about 3/8 of a mile above the mouth of Unicorn Branch. The "Upper Ford" he places near Millington (Figure 6.13). Based on kayak surveys done for this project, the upper option seems most likely, based on both the width and depth of the river at these two locales – fording would have been far easier above Millington, where the stream narrows and becomes quite shallow. On the other hand, the headwaters have branched at this point, so there are more small streams to cross.

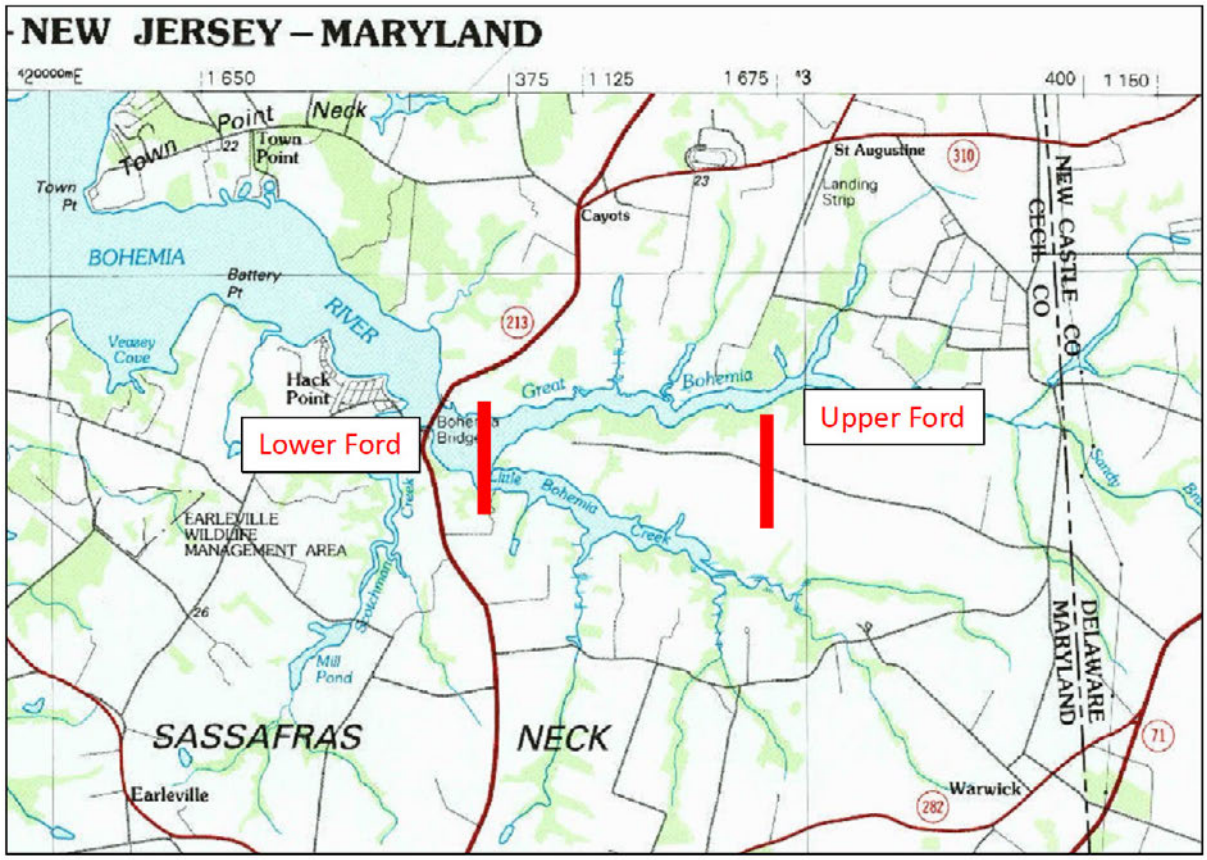


Figure 6.13. Fords across the Chester River, as posited by Marye (1936b) (base map extracted from USGS Dover, DE 30x60 Minute Quadrangle, 1984)

Other trails also linked Algonquian communities. Marye's work in land records found various references to a "Wiccomese or Whorekill Path" near the head of the Sassafras (Marye 1938b:150). This presumably linked the Wicomiss with the southern Delawares, or Unami, who had a village, Chicconese, on the Whorekill, near present-day Lewes, Delaware. As the crow flies, the distance from the head of the Sassafras to Lewes is about 54 miles along a southeasterly route. In order to avoid the wider streams where they emptied into the Delaware, this trail likely ran inland some distance and presumably crossed the Choptank or Delaware Path at some point.

Confusing matters a bit is the fact that the Nanticoke also maintained ties to the Unami. The closest Nanticoke town to Chicconese was at Broad Creek, a distance of about 50 miles (Rountree and Davidson 1997:98). Rountree and Davidson call this the Whorekill or Wicomiss Path, citing Marye – but Marye makes no reference to this connection, stating explicitly that "the "Wicomisse" or Whorekill Path was a path used by the Wiccomiss Indians which connected the head of the Sassafras River with the district formerly known as the Whorekills, that is, the country in the immediate vicinity of Cape Henlopen" (Marye 1938b:150-151). So Chicconese and the Unami seem to have been connected both to the Wicomiss, to the northwest, and to the Nanticoke, to the southwest. Both of the paths linking to Whorekill must have crossed the

Delaware or Choptank Path, and via these routes the Wicomiss and Nanticoke had multiple routes connecting not just to other Native groups, but also to trade with the Dutch and Swedes as they came onto the scene. These linkages were viewed with suspicion by Maryland's provincial authorities, who both frowned on Nanticoke relationships with "foreign" tribes and viewed some of these areas as their own territory (Rountree and Davidson 1997:98).

A generalized projection of possible path locations and routes is shown in Figure 6.14, overlaid on the Augustine Herman map of 1670.

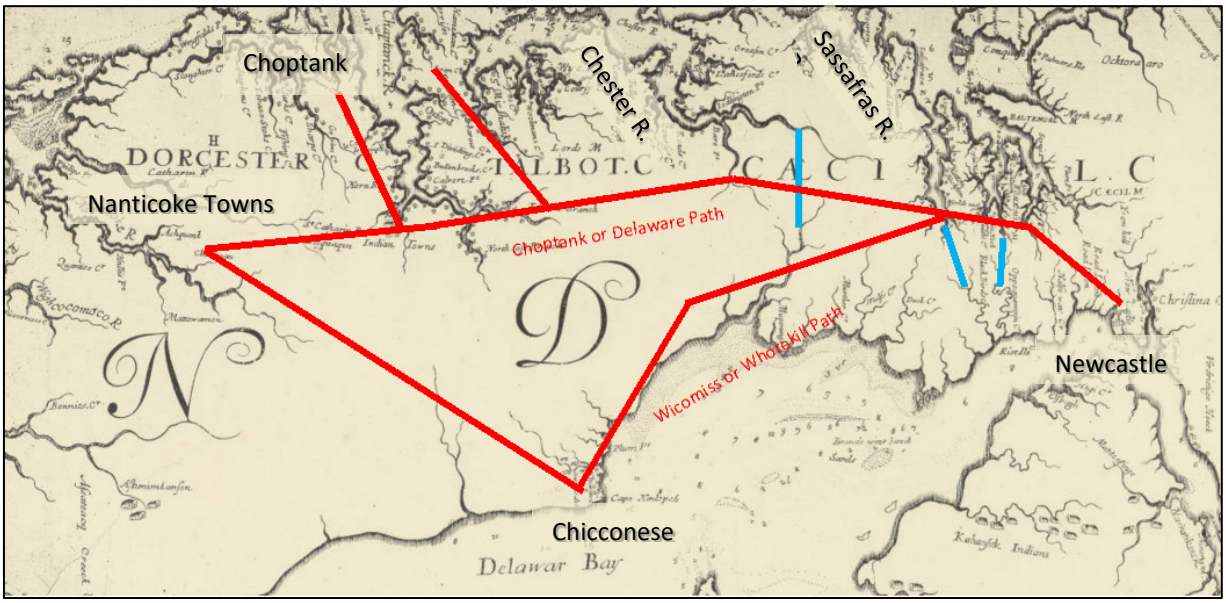


Figure 6.14. Hypothetical, generalized Indian paths based on Marye; blue lines represent paths linking Chesapeake and Delaware tributaries (superimposed on an extract from the Augustine Herman map of 1670).

Native paths took into account terrain and obstacles, generally seeking ease of movement. The underlying topographic variables do not change greatly over time, therefore it is no surprise that colonists adopted many of these trails, expanding them into "cart roads" and carrying on a long tradition of overland travel. The maps of the 17th C. are unhelpful in reconstructing these roads, but because the pathways persisted, the more comprehensive mapping of the 18th C. can be used with caution. One of the best of the maps is the 1794 map of Maryland compiled by Dennis Griffith. An excerpt of the Griffith map is shown in Figure 6.15, highlighting some potential congruence between the paths that Marye wrote about and the late 18th C. roads.

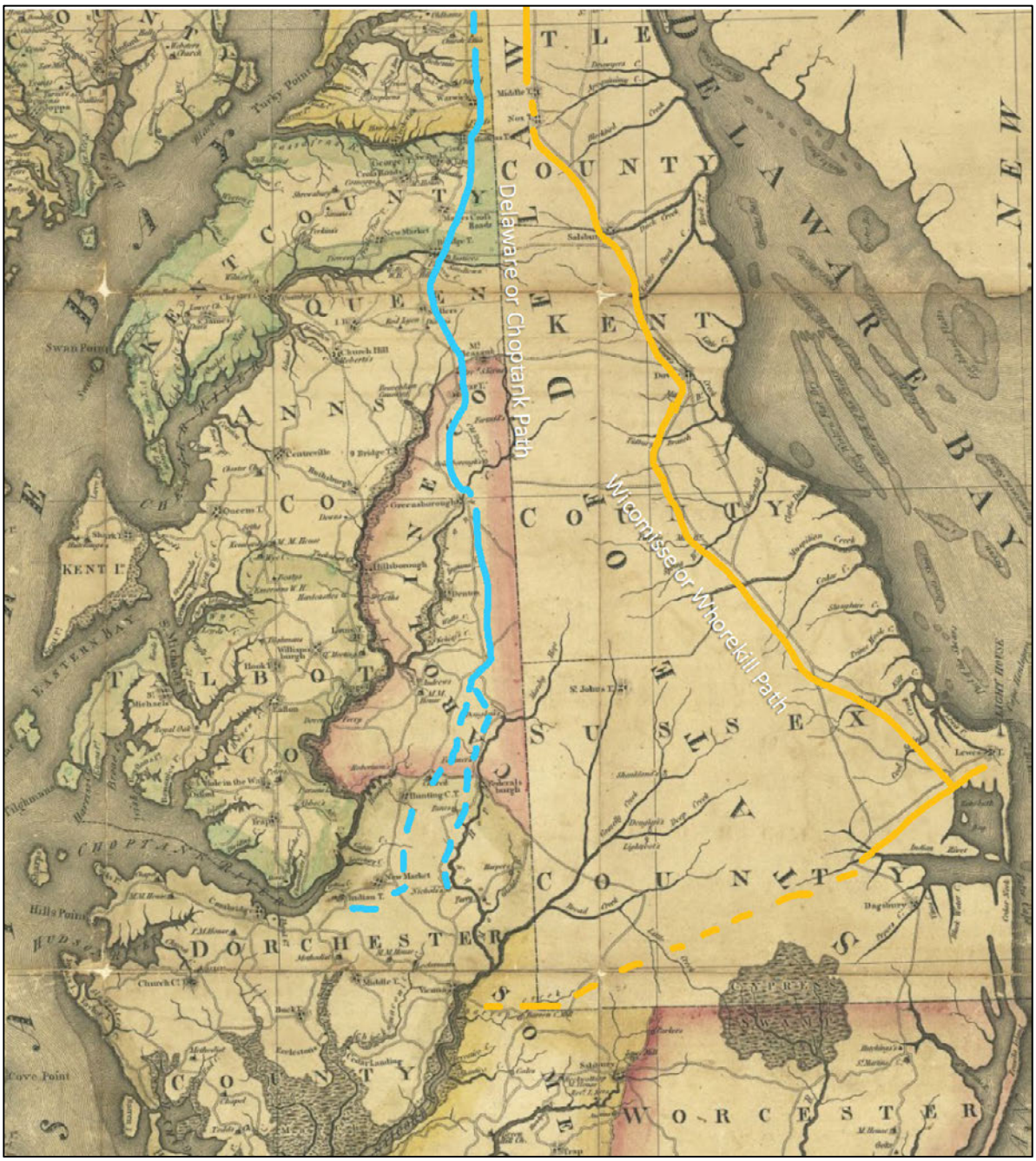


Figure 6.15. Possible routes of the Choptank (Delaware) path and Wicomisse (Whorekill) path on the 1794 Griffith map (extract)

Although there is uncertainty in the precise alignment of the paths about which we know, and there certainly must have been other trails that went unrecorded, it is clear that there were multiple overland connections between the various peoples of the Delmarva Peninsula and beyond, allowing the movement not only of trade goods, but of people, ideas, and news. These stitched together the Algonquian world and ensured communication and continued cultural linkages, while connecting them to non-Algonquian trading partners and

eventually, Europeans who moved into the region. As we think about this indigenous landscape, it is important not to think solely about boundaries, but also about connections.

The Spiritual Landscape

Much of the above concerns what we might call the "practical landscape," the ways in which resources were used, where people settled, how they organized themselves, and how they moved about. But Native peoples had a rich spiritual belief system and did not segregate or wall off their natural world from the spiritual in the way that many Western societies do. It is imperative to think about this aspect of the indigenous landscape, while recognizing that doing so here, in a separate section of a report as a matter of convenience, is very much at odds with the way native beliefs and practices were intermingled and more holistic, without the boundaries we are applying.

It is equally important to understand the landscape of the Chester and Sassafras watersheds in terms of a long and evolving social use of space and place, with long term associations, memories, and meaning, not just focusing on 1607-1660, for example. Furthermore, it behooves us to follow Gallivan (2016:10) in understanding the difference "between *objective* characterizations of topographic feature and ecological settings…and efforts to recover evidence bearing on *subjective* experiences of a place." A focus on the subjective (or emic), which allows us to try and slip into the mindset of Native peoples, is much more difficult than objective (etic) description. And again, a caveat is necessary – given the paucity of historical documentation, ethnohistory, and descendant population knowledge for this project area, we must draw on comparative material from other Algonquian groups, even as we recognize there may be important differences from group to group. This is not a perfect approach, but it is the best one available to us at this time. With that in mind, we can attempt to understand some of the subjective and more ideological aspects of the landscape.

The difference between objective and subjective approaches has been picked up on by other researchers. Budwah and McCreary (2013) point out that indigenous geographies are shaped by holistic relationships to their territory, both subjective and material. Places have meaning and identity that are shaped by human action. These actions can include the mundane, such as hunting, or the spiritual, such as sacrificing animals or throwing stones into rivers "to recognize their perpetual motion and sacred nature" (Gallivan 2016:188). Indigenous views of the landscape are inevitably informed by generations of such experience on the land, and by handed-down stories: "the matrix of relationships within this physical and spiritual landscape defines Indigenous ways of being" (Budwah and McCreary 2013:200). As Gallivan (2016:xvi) notes in relation to the Powhatan, "groups continued to link their spatial practices to important places on the landscape. They did this by returning over and over again to persistent places for the burial of the dead, communal feasts, and social and religious ceremonies to reify identity and a sense of community – with both the living and the ancestors." The "distant past is present."

These relationships and associations are long-lasting, as are the memories held by a people, even after they have moved from one territory to another. Gallivan cites a number of examples where people who had been forced away from their traditional homes returned, time and again, to bury their dead, to inter objects, and to sacrifice animals. “The continuation of such practices in the shatter zone of colonial Tsenacomacoh contradicts a narrative of abandonment, acculturation, and disappearance. Instead, these postcolonial commemorations within precolonial places highlight lasting ties to ancestors and homeland” (Gallivan 2016:22).

Gallivan (2016) highlights the way in which indigenous mapping, or concepts of physical and social space, move in concentric circles from the center to the periphery. In the center were the people – us, members of our group, the civilized, the maize eaters. In the periphery were outsiders - the uncivilized, the non-maize eaters. Gallivan points to the use of circles in this fashion in a variety of ways and forms, including Powhatan’s mantle. He also points to parallels between Powhatan divination ceremony and Lenape, both using cosmograms of concentric circles (as expressed in part in the Lenape g*amwing*). An example of place-making through stories of experience and place is Samuel Argall’s account of a Patawomeck creation story, linking it to place (Gallivan 2016:52-53). Although few such stories have been recorded for the Virginia Algonquians, and none from our project area, Native place names and town names help to show how people developed a sense of place, social space, and meaning in the landscape. These meanings and connections remain importance to Native peoples today. Even when specific connections may have been lost, the concept remains ever-present and powerful when they think about their past or explain it to outsiders.

Although we have few such clues for the Tockwogh and Ozinies, we can confidently assert that feasts, ceremonies, burials, and other activities were associated by them with villages and specific locales within their territory. Many or most Algonquians probably acted similarly to the Powhatan in their habit of bathing in rivers each morning and following this with prayer and offerings; they also gave thanks before eating (Rountree *et al*. 2007). Larger ceremonies involving entire villages were held in times of happiness and in times of privation or sadness. Places where these activities were carried out had meaning. With the passage of time, year after year, and through successive generations, these memories accumulated, just as the places accrued more and more meaning and, perhaps, spiritual power. The linkages were remembered, just as various events associated with specific places were remembered and handed down between generations. This was part of what made the forced removal of Native peoples so painful. And when they did move, they still remembered, and often returned. When they found these places disturbed or defiled, they often objected.

Figure 6.16. "Indians Dancing Around A Circle of Posts." John White (1585). (John White Drawings, Virtual Jamestown, The Institute for Advanced Technology in the Humanities, University of Virginia; http://www.virtualjamestown.org/images/white_debry_html/white38.html)

We have several early examples of burials, or tombs, where such disturbances were observed. On May 7, 1686, the "King of the Assateagues" lodged a complaint with the provincial government (Browne 1883, Vol. 5:480):

> The King of Assateague complaines that several of the Inglish (viz) M^{r} William Browne, Edward Hammond, William Bowen, John Fossett, Henry Bishop &c were come and seated among them in the very Towne where they live—but particularly he complaineth against Edward Hamond for that whereas it is a custom among them upon the death of an Indian King to save his bones and make a case with skins wherein they inclose the bones and fill it up with

> Ronoke, and other their riches he the said Hamond about a month since had upon the like occasion of one of their kings dyeing stolen away the skinns and roanoke from the place where he was layd, which one Epimore a greate man of Assateague did see at the sayd Hammond's house and very well knew to be the same, and alsoe one Manassen an Indian that lives with said Hammond did see him bring them home.

The Council adjourned to consider this complaint and associated complaints of English encroachment, and the next rendered a judgement (Browne 1883, Vol. 5:483):

> [Whereas] one Edw^{d} Hammond an Incroacher of that nature hath most injuriously and feloniously stolen and taken away greate quantityes of Roonoake and skinns from the tomb of some of their former Kings, which (according to their custom) they use to offer there (a crime very ill resented with them) and therefore mooves redress to be made him, and that some more certain provision for their future quiett liveing from the disturbance and Incroachments of the English may be thought off…

This was not the only incident of this nature. In 1706, the Council heard a similar complaint from Charles County (Browne 1905, Vol. 25:203):

> His Excellency acquaints the board that Complaint has been made to him on behalf of Divers Indians living in Charles County that a Tomb wherein an Indian Queen is buried has been broken open & robbd & divers goods of a Considerable value Stolen thence by Englishmen and women living contiguous to the Indian land. He desires to have the opinion of the board therein what they thinke most proper to be done for the relief of the Complainants.

A year later, something similar happened. Council records from April 5, 1707 relate the following (Browne 1907, Vol. 27:29):

> Upon the application of Seaven Chaptico Indians on the behalf of Nannsonan their Queen Ordered that the goods which were found to have been Stolen out of the said Queens Daughters Tomb and now in the Custody of John Rose late Constable of Chaptico hundred be delivered to the Said Queen or such she shall Direct to receive the Same. And likewise Ordered that the said Indians apply to the honble Kenelm Cheseldyne Esq^{r} who will see Justice done them.

Finally, there is an account from closer to the project area, in Dorchester County. Rountree and Davidson (1997:139) recount the 1706 complaint of the Nanticoke that three Englishmen living near the Chicone reservation broke into and robbed the “Quiacason or

Sepalchre House" of Ashquash, "King of the Nanticoke," and stole £100 of goods. As Ashquash was still alive at the time, these were either mortuary goods placed in the Quiacason for his ancestors or his personal property. They included fourteen red and blue matchcoats, twelve new white shirts, twelve pairs of stocking, eight "striped stuff gowns," two petticoats, twelve yards of printed calico, over a 100 arm's lengths of "long" and "short" wampum, four wampum wristbands, and six wampum collars (Rountree and Davidson 1997:139-140). This reinforces our earlier observations about the relative importance of English vs. native goods, while also highlighting the wealth of a chief, compared to that of a more common person like Machicopah.

Figure 6.17. "Indians Charnel House." John White (1585). (John White Drawings, Virtual Jamestown, The Institute for Advanced Technology in the Humanities, University of Virginia; http://www.virtualjamestown.org/images/white_debry_html/white37.html)

There are several other important revelations from these accounts. First, although one target of theft was new (Ashquash's sepulchre) and another recent (the tomb of Queen Nannsonan's daughter), the others may have been older. Nevertheless, their locations were remembered and observed, and any disruption or disturbance was both noticed and a matter of concern. Second, the provincial authorities took these complaints seriously, probably reflecting their recognition that these were matters of great import to the tribes. Left unresolved, they could lead to serious friction. Although these were tombs of important people and presumably known by settlers to contain wealth, there must have been many other interments that were less visible to the English, but well known and remembered by the Native peoples.

There is, of course, much that we don't know about the people living in the Chester and Sassafras River watersheds at the time of contact and what happened to them. When they were forced out, did they remember burials and other sacred spots and return? Did they attempt to take the remains of their ancestors with them? Gallivan (2016:180-181) reports that before the 1622 uprising in Virginia, the Powhatan collected the remains of their dead and moved them elsewhere, as did the Nanticoke when they shifted settlements. He also points out that Thomas Jefferson and others recorded Native peoples returning to burial sites, journeys that must have been prompted by memory and a drive for commemoration. Once they moved to new locales, whether by choice or through forced removal, they tried to adapt and establish new linkages, new memories, and new traditions and institutions, while simultaneously remembering and honoring the past and their former homes. These remembrances meant returning to their deeper history and important places, for as long as that was possible.

CHAPTER 7
THE ARCHAEOLOGICAL LANDSCAPE

Early Archaeology

Archaeological investigations in the project area offer a means of adding objective data on past human activities, filling in gaps left in the sparse historical record, and checking on the assumptions and analogies we have drawn from comparative data in surrounding areas. However, we find ourselves in a similar data-poor position with archaeology, as the region has not seen as much investigation as many areas on the western shore of the Chesapeake. Nonetheless, archaeological evidence does prove informative, sparse though it may be. Our data are drawn from regional site reports and articles, as well as from the archaeological site files held by the Maryland Historical Trust. In addition, we draw on predictive modeling and surveys done by the authors to assess that model in the project area.

Interest in the Native American past of the area has deep roots. People have long collected artifacts from plowed fields, and Native American materials are even found in English contexts of the 17th C. (e.g., recent unpublished finds by the authors at Andelot Farm [18KE125]), some probably picked up as a matter of curiosity in much that same way as people do today. In the mid-19th C., Washington College Professor Peregrine Wroth walked the fields and shorelines of Kent County, speculating on the location of an early town, New Yarmouth, and the nature of the earlier inhabitants (Wroth n.d.; Denroche 1893). As the 19th gave way to the 20th C., antiquarian Francis Jordan (1895, 1906; see also Curry 2002) wrote on Native village sites and fishing stations in the Middle Atlantic, and his 1906 volume had a chapter on the Eastern Shore, in which he related findings in Kent County, especially around the Still Pond area. His focus was the extensive shell middens in the western part of Kent County, but he also reported a farmer who had found a burial containing what he described as a copper spear point and a copper “hoe blade.”

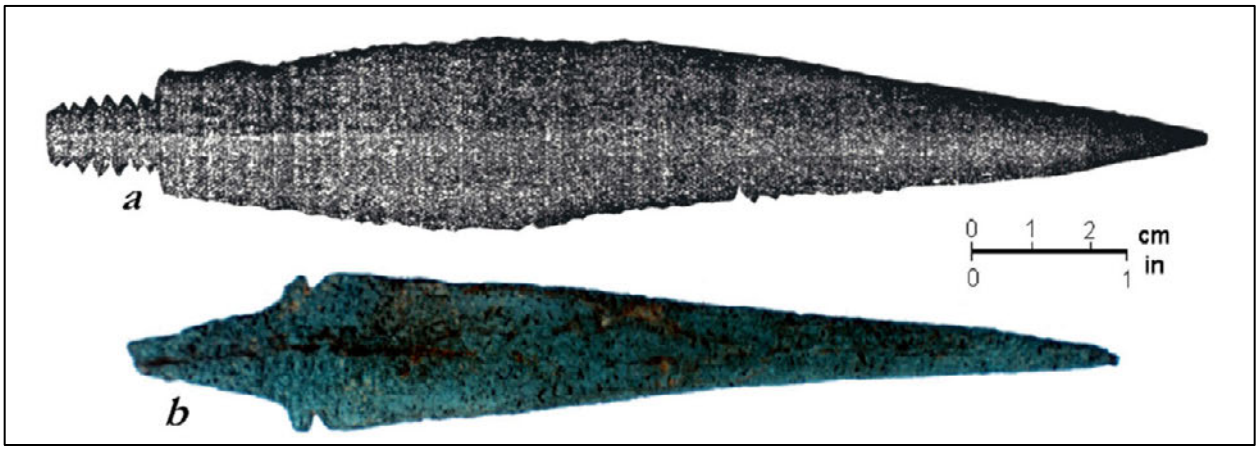


Figure 7.1 Copper artifacts recovered from Still Pond, per Jordan (1906) – image from Curry (2002:Figure 1).

Curry (2002) has discussed these artifacts, as well as more recent archaeology in the vicinity and copper artifacts recovered elsewhere in the region. He sees these as conforming to the Archaic "Old Copper Culture" found in the Great Lakes region, and they certainly point to an active and far-reaching trade network if that is the origin. However, Lattanzi (2007) has analyzed similar materials recovered from New Jersey and the Delaware Valley, finding that in addition to copper sourced in Michigan, the artifacts indicate closer sources, namely copper mined in New Jersey and Pennsylvania. This indicates an even broader network and emphasizes the utility of such chemical sourcing. Regrettably, the artifacts from Still Pond have long since vanished and their whereabouts are unknown.

Archaeological Site Types and Distributions

Since the early 1900s, other archaeological investigations have taken place in the region, both in regional survey and site-specific excavations. Some of these efforts have been area surveys designed to build up regional site inventories, while others have been site-specific. This discussion will first review the data in the Maryland Historical Trust's site forms and online GIS system, MEDUSA. That offers a look at site types recorded across the entire project area. This will be followed by a discussion that explores the various site surveys and site-specific investigations in the area, moving from the south, in Queen Anne's County, to the north across Kent and into Cecil County. In Queen Anne's County, Lowery conducted extensive surveys in the early 1990s (Lowery 1992, 1993a, 1993b, 1994, 1995). In Kent County, the two biggest surveys are those conducted by Wilke and Thompson (1974, 1977, 1979) and more recent surveys by teams from Washington College (Seidel and Lowery 2008; Seidel and Schindler 2012; and various site forms and GIS products on file at Washington College's Past Is Present Archaeology Lab). Finally, we will review an archaeological predictive model based on these distributions, before offering some conclusions. These discussions will focus primarily on the Maryland portions of the project area, as they encompass the vast bulk of the two watersheds and also because the data are much more readily available than information from the much smaller portion of the project area in Delaware.

The data in Tables 7.1-7.3 are drawn from the archaeological site files at the Maryland Historical Trust. They are restricted to Woodland and Contact period sites, excluding Archaic and historic materials, since they are not the focus of this cultural landscape effort. The site types reported are a function of the nomenclature used by individual researchers, albeit with some guidance from the Maryland Historical Trust. It is not always clear what the difference is between a "short-term camp" and a "short-term resource procurement site." Presumably the latter has clear indications of resource procurement, while there are no overt signs of procurement in the former – but is likely that many or all of these sites involved procurement of some sort, including oyster middens and lithic quarries. In reading the site forms, one gets the sense that there are idiosyncrasies and an evolution in how these terms are used, but for the purposes of this study, the categories are nonetheless useful.

Table 7.1. Woodland and Contact site types and frequencies in the Chester River watershed.

CHESTER RIVER WATERSHED	
Queen Anne's County Side (south of river)	***No. of Sites***
Lithic scatters	115
Shell middens	100
Woodland (Late)	1
Short-term camps	27
Base camps	4
Lithic reduction area	1
Contact period short-term camp	1
Village site	3
Subtotal	*252*
Kent County Side (north of river)	***No. of Sites***
Lithic scatters	19
Shell middens	26
Short-term resource procurement site	12
Short-term camp	9
Burial	1
Subtotal	67
Watershed total	***319***

Table 7.1 summarizes the Woodland and Contact site types found in the Chester River watershed. The larger number of sites (N=252) in Queen Anne's County, as opposed to Kent County (N=67), may be a reflection of two factors. The first is simply a difference in survey activity. Far more surveys have been conducted along the south side of the Chester River, largely because of Lowery's sustained effort. However, the second possibility is that it reflects a real difference in site distributions. It may be that Woodland peoples had a preference for the southern shoreline of the Chester, whether for territorial considerations or for some other reason. For example, if the territory of the Ozinies extended from the Sassafras down to the Chester, it is conceivable that they would have had their villages in the north, restricting the southern portions of their territory and the Chester River shoreline to dispersed camps and seasonal occupation. But based on the limited data available, we have no way of knowing at present whether that was the case or if similar variables might have been at work. This points to the need for additional survey and a balance in survey coverage between different ecological zones. It is our suspicion that the major factor behind the distribution difference is survey coverage, but that both factors are at work.

On the Queen Anne's County side of the Chester River, there is a relatively even balance between lithic scatters (N=115) and shell middens (N=100), the two most numerous of the site types. Short term camps follow (N=27) and there are three village sites identified. On the Kent side of the river, lithic scatters (N=19) and shell middens (N=26) again dominate, closely followed by short-term resource procurement sites (N=12) and short-term camps (N=9). One burial site was reported.

Although technically not germane here, as it is out of the time period for this study, it is important to note the frequent reports of human remains being recovered by watermen off Nichols Point on the Kent side of the river just above the mouth of Langford Creek (Figure 7.2 – depth contours approximate earlier shorelines at lower sea level). These seem to be Archaic in age and likely come from a burial ground that was inundated by rising sea level. These are the ancestors of Native peoples and deserve protection and respectful treatment. As members of the Nanticoke Indian Association (Ragghatha Calentine and Chief Natosha Carmine) emphasized to us, they see these as their relatives, not as "skeletal material" or "human remains." In the development of this indigenous cultural landscape area by the National Park Service and its partners, we recommend providing such protections, offering targeted community education, and launching an effort to seek the appropriate treatment and repatriation of the remains of these ancestors, as well as any associated grave goods, that may remain in private hands or that are found in the future.

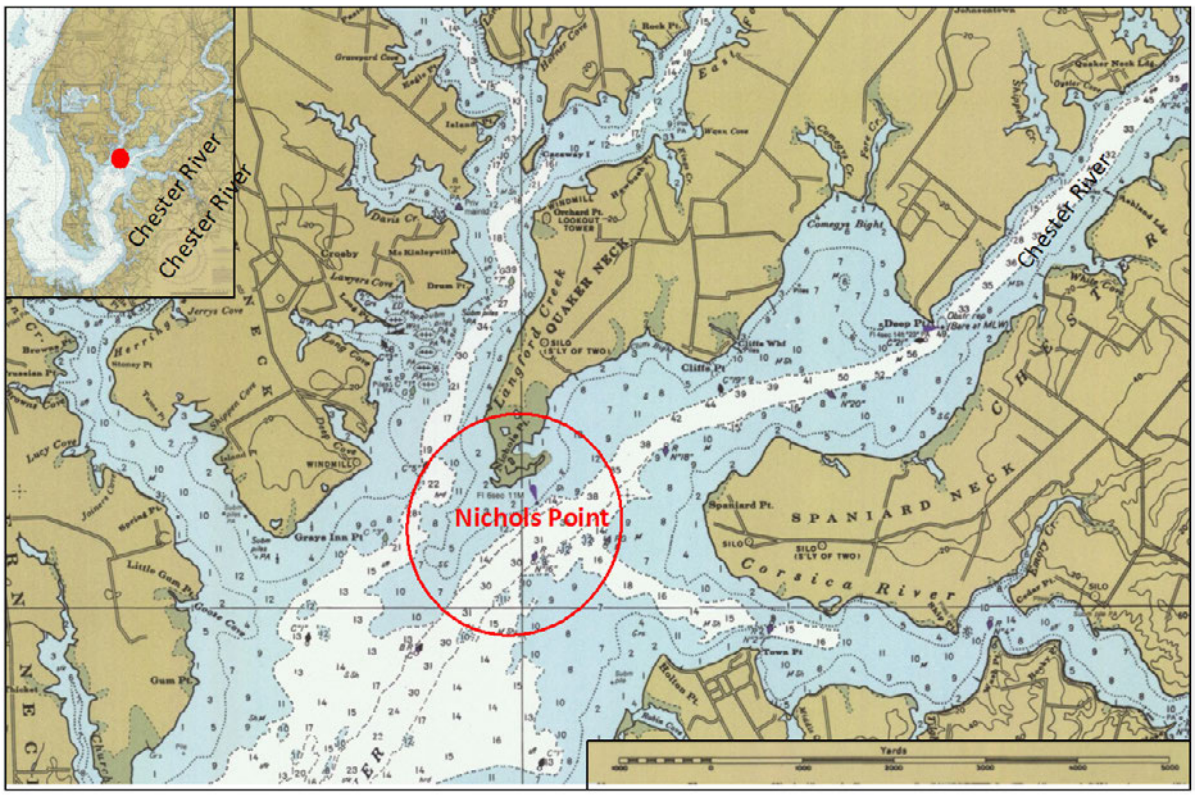


Figure 7.2. Location of Nichols Point on the Chester River. Depth contours in feet. Base map: NOAA Nautical Chart 12272 - Chester River (1984).

As a final note on site distributions for the Chester River watershed, reported sites are overwhelmingly located along the shorelines of the river or along larger tributaries. Relatively few sites have been recorded in the interior of either county, with one important exception. That is in the eastern section of Kent and Queen Anne's Counties, where there are numerous sites that appear to be predominantly associated with Delmarva Bays (See chapter 2). These were highly favored locales for resource procurement over long stretches of time and thus saw much activity by Native peoples. The recorded sites are predominantly those documented by Lowery in Queen Anne's County, but anywhere that these seasonal wetlands exist one is likely to find traces of Native American activity.

Table 7.2. Woodland site types and frequencies in the Sassafras River watershed.

SASSAFRAS RIVER WATERSHED	
Kent County Side (south of river)	
Lithic scatters	26
Shell middens	4
Woodland (Early or Late)	3
Base camp	1
Short-term resource procurement site	18
Short-term camp	12
Lithic quarry	2
Subtotal	*66*
Cecil County Side (north of river)	***No. of Sites***
Lithic scatters	14
Shell middens	-
Woodland base camp	1
Short-term procurement site	5
Short-term camp	1
Base camp	2
Subtotal	*23*
Watershed total	**89**

Moving north in the project area, the Sassafras River watershed site frequencies for the Woodland period are reported in Table 7.2. As discussed in greater detail below, more survey activity has taken place on the Kent County side of the Sassafras River than on the Cecil County side. This is reflected in the numbers reported: 66 sites on the south side of the river and 23 on the north side. Lithic scatter sites predominate on both sides of the river, but shell middens are far less frequent than in the southern watershed, and no middens have been recorded on the

Cecil County side of the river. This no doubt reflects the lower salinities upstream, but as shown below, there are abundant oyster middens just a bit farther south on the Chesapeake Bay shoreline of Kent County. No villages have been recognized in any of the surveys in this watershed, Smith's description of Ozinies notwithstanding.

From a technical standpoint, the western fringe of Kent County along the Chesapeake Bay is not part of the two watersheds under study. But this distinction is somewhat arbitrary and certainly not a distinction that would have been recognized by the Native peoples in our area. The oyster resources along that shoreline are so abundant that they certainly would have been incorporated into the seasonal rounds of the Tockwogh and Wicomiss. We therefore examined a subset of the Bayside area, from Worton Creek in the south to Still Pond Creek in the north. The site types and frequencies are summarized in Table 7.3.

Table 7.3. Woodland site types and frequencies in the area between Worton and Still Pond Creeks, Kent County, Chesapeake Bay watershed.

BAY SIDE (PORTION)	
North of Worton Creek to south side of Still Pond Creek	***No. of Sites***
Lithic scatters	15
Shell middens	47
Short-term resource procurement site	20
Short-term camp	2
Area total	**84**

The fact that the number of sites recorded in this smaller, restricted area (N=84) rivals all of those recorded along the north and south sides of the Sassafras (N=89) emphasizes how prolific these resources must have been. However, it also is true that the 47 shell middens that comprise half of the recorded sites are in fact almost continuous in some places, and often quite deep. This is a testament to many generations of Native peoples who harvested oyster beds, consumed oysters and other shellfish, and used the shell as temper in their pottery. As the shell in these middens decomposes and releases calcium carbonate, the soil chemistry has changed dramatically, with pH values of 6.9-7.7 (with a mean pH of 7.2). Normal pH in the surrounding soils without the shell deposits ranges from 3.6 to 5.5. This different pH level in the middens supports a startling range of plant species that simply are not seen in most of the Eastern Shore (or anywhere on the coastal plain). McAvoy and Harrison (2012) have examined fourteen shell middens in the region. Ten were in Kent County, including extensive middens on Andelot Farm (located between Worton and Churn Creeks). On these middens, McAvoy and Harrison catalogued 223 species of plants, mostly native (21 non-native); 87 were rare, including 21 species found nowhere else on the Delmarva peninsula. Species include Chinquapin oak (*Quercus muehlenbergii*), wild columbine, Eastern Hop-hornbeam (*Ostrya*

virginiana), redbud, smooth rockcress (a member of the mustard family), large-seed forget-me-not, and bottlebrush wild rye. These plant communities started to develop 2,000 years ago, but perhaps as early as 3800 BP. By the Late Woodland, they were firmly entrenched, and the unique and isolated floral communities offered yet another dimension to foraging for Native peoples.

Archaeological Investigations in the Project Area

Queen Anne's County was fortunate to have received the attention of archaeologist Darrin Lowery in the early 1990s. With grant support from the Maryland Historical Trust, Lowery conducted extensive surface surveys, especially from Kent Island up the south side of the Chester River (Lowery 1992, 1993a, 1993b, 1994, 1995). He contributed significantly to our understanding of that area, recording more of the 252 Woodland and Contact Period sites in that portion of the project area. Among these was Indiantown Farm (18KE485) and a number of other sites and artifact scatters along this part of the Chester River shoreline, upstream from Conquest Beach and opposite Comegys Bight. The concentration of sites in that particular area is very dense. Most of these sites are Late Woodland shell and lithic scatters, with extensive shell middens.

Indiantown (see Figure 8.14 for location) is particularly important because it is likely a village site, one of the very few identified for the project area. The name "Indiantown Farm" is intriguing in itself, as we know the predilection of settlers for cleared Native fields and their common practice of using "Indian" in subsequent place names. Also, Lowery is confident that it has a strong Contact component. His 1993 work assessed the site as having subsurface integrity. In evaluating the archaeological potential of the Chester River, the lead author for this project assessed this as the likeliest location for Ozinies, or the major site for the Wicomiss (Seidel 2005, 2009). This evaluation, along with Lowery's assessment, made it the target for a 2009 archaeological field school led by Dr. Bill Schindler of Washington College (Seidel and Schindler 2012). A total of 26 shovel tests were excavated, along with three 5x5 ft excavation units. The updated site form summarized the results of the investigation as follows (Maryland Historical Trust MEDUSA: 18KE455 Site Form):

> The upper strata in all three excavation units were a mix of historic and prehistoric artifacts. Underlying this extended a compact oyster shell midden that was most likely Late Woodland in age. Below the midden were remains of what appeared to be the residues of a high level of food processing activity. This is inferred from the remains of a variety of animals including deer, beaver, and turtle as well as hearth features (including charcoal and thermally altered rocks). Most interestingly, Excavation Unit 3 also produced a number of post molds, along with additional food processing residues that may relate to the food processing activities in Units 1 and 2. A single diagnostic, an Orient Fishtail point, suggests a possible date of Transitional Archaic/Woodland for the lower levels. This was not evident from earlier intensive surface collection efforts, which only recorded Late

> Woodland-Contact period materials and a possible Middle Woodland component.
>
> The large number of cobbles and pebbles (many of them thermally altered) as well as the animal remains in lower strata support the interpretation of intense food processing. The lack of a significant amount of ceramics in all strata suggests that this location was a transient camp utilized for the purpose of food procurement and processing. The lack of formalized tools also supports this. The majority of flaked stone tools are basic flake tools primarily made of quartz and quartzite.

Archaeobotanical materials from these excavations were analyzed (McKnight 2013), and the results are significant because there are so few comparable analyses in the area. Eleven flotation samples were analyzed, totaling 32.25 liters collected from six cultural features and from several non-feature contexts. Archaeobotanical remains were present in all of the analyzed samples, along with a variety of natural ecofacts and cultural artifacts. Wood charcoal in the samples was dominated by white oak and hickory species, along with American chestnut, eastern red cedar and red oak. The only comestibles were thick-walled hickory nut and sumac seeds. All of the wood, nut, and seeds identified are native to the project area and conform to what are believed to be favored food and fuel sources of Native peoples of the region. While the data from these samples are limited, in part because of the limited excavations, they offer a rare addition to our baseline data on archaeobotanical remains. (McKnight 2013)

In comparing the surface indications from Lowery's survey work with the limited exposure from the three 2009 test units, our current assessment is that this subsurface investigation was too limited for us to confidently classify this larger area solely as a transient camp, and further investigation is warranted. When viewed in conjunction with the adjacent sites and the historical context, this site holds great potential as major site from the period before and after Smith's 1608 visit, and we continue to believe that it is the most likely site of Ozinies.

Moving across the Chester River, the first regional survey to encompass a large area was the Kent County Archaeological Research Project (KCARP) launched by Steve Wilke and Gail Thompson in the early 1970s (Wilke and Thompson 1974, 1977, 1979). Following the principles of the "New Archaeology" of the 1970s, their approach was "processual" in nature. Processual archaeologists took an explicitly anthropological point of view, arguing that the study of cultural evolution, especially as environmental adaptation, was the key to understanding culture change over time. One approach favored in this school was large area survey, using statistically random sampling techniques to avoid bias. Wilke and Thompson followed this approach, in particular with a "non-site" orientation, as opposed to site-based survey. Site-based surveys start by searching for artifacts, and then following up by establishing the extent of artifact distributions and drawing site boundaries. Non-site surveys instead covered wide areas and plotted all artifacts, looking at general distribution patterns and densities to quantitatively understand the relationships between artifacts and assess past behavior (see Dunnell and Dancey 1983;

Wandsnider and Camilli 1992). Over the course of several years, Wilke and Thompson surveyed large portions of the western part of Kent County, particularly along the Chesapeake Bay shoreline, but also along the Sassafras River. The work was largely done in Kent County, but also extended into southern Cecil County. They also surveyed some inland areas, especially along tributaries. In total, some 87 tracts of varying sizes were surveyed (Wilke and Thompson 1978), and artifact densities were plotted and analyzed to yield different site types, such as short-term camps, resource procurement areas, lithic quarries, and so on. They also retrieved samples of shell from oyster shell middens for radiocarbon dating, but the reliability of those dates has been challenged (Custer *et al.* 1996:46). The Wilke-Thompson survey work was particularly useful in fleshing out the inventory of prehistoric sites on Kent County (they paid less attention to historic materials), and it gives an idea of densities and the ubiquitous nature of Native presence along the shorelines.

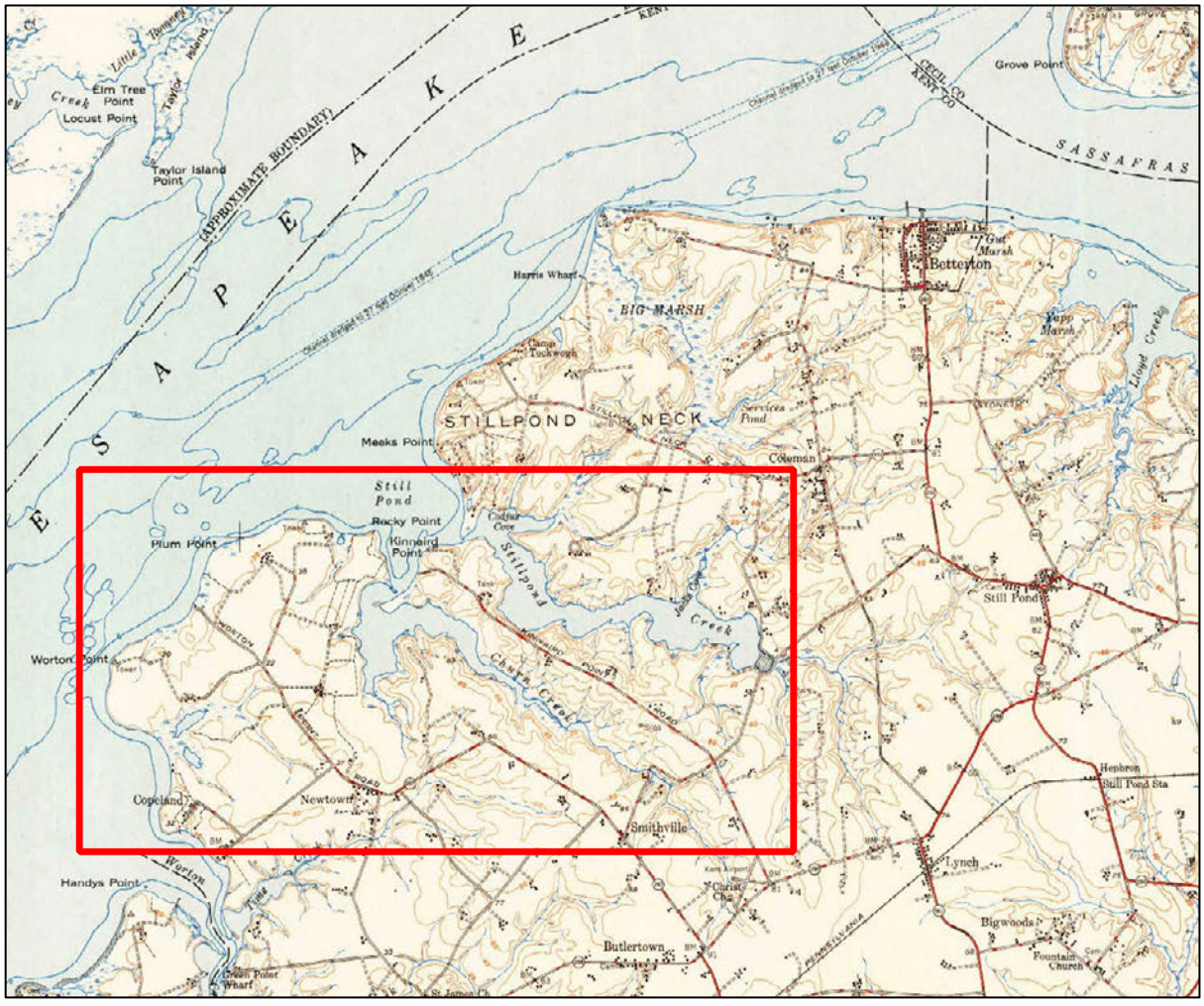


Figure 7.3. Generalized location of sites 18KE25, 18KE29, and 18KE71 (Betterton 15' quadrangle, USGS 1951)

The work of Wilke and Thompson has provided a basis for additional research in the area. Wilke has recently re-engaged with the survey data and is in the process of compiling a new synthesis (Daniel Griffith 2022: personal communication). In addition, Custer and Doms (1983) re-analyzed materials from the Wilke-Thompson surveys. Their work was important in showing how additional analysis could yield a more comprehensive description of the materials, while highlighting types of special interest. From that perspective, it enhanced the research utility of the earlier collections. Custer *et al*. (n.d.) also have revisited one of the more important sites discovered by Wilke and Thompson, the Arrowhead Farm Complex (18KE29). Technically, this falls outside of the two watersheds that are the focus of our work, but it is worth noting and may shed light on some of the population movements in the area during the Contact period. Located on Kinnaird Point (Figure 7.3), between Still Pond Creek and Churn Creek, the 18KE29 site had produced materials dating from the Late Archaic through Contact.

Of particular interest in Custer's investigation were plowzone finds of a large amount of Minguannan pottery and triangular projectile points, roulette-decorated pipes, gunflints made from local pebbles, scraps of brass, and some clearly 17th C. artifacts that included North Devon gravel-tempered earthenware. The plowzone context did not allow for a clear understanding of whether or not the 17th C. materials were part of the same Contact period occupation or from a later historic site.

The North Devon materials aside, the materials from Arrowhead Farm 18KE29 offer a more detailed look at the Contact Period in this area, at least from a Native American perspective. Minguannan pottery is a Late Woodland ware, with sand, quartz, or grit temper. It typically has cord-marked or fabric-impressed exterior surfaces, and broad line, incised direct cord and pseudo cord decorations. Based on stratigraphic information from excavated sites, the ware dates from 1220 AD to about 1650 AD. Its regional distribution is northern Delaware, southeastern Pennsylvania, and the Piedmont and Coastal Plain region of northern Maryland at the head of the Chesapeake Bay. The Maryland Archaeological Conservation Lab (n.d.), which offers descriptions and photos of this and other diagnostic artifacts, shows the distribution extending through Kent County and well into Queen Anne's County, but it is rare there and much more prevalent in Delaware and the northeastern portions of Maryland. It is not a major ware type for the project area, so its prevalence on this site is intriguing.

More recently, Dan Griffith has been analyzing ceramics from the Wilke-Thompson collection as part of Wilke's new synthesis. Although not yet ready for publication, he graciously shared some of his findings with us (Griffith 2022, personal communication). Griffith's analysis revealed a smattering of Early to Middle Woodland pottery in the Wilke-Thompson surveys, including large amounts of Mockley and a small amount of Wolf Neck pottery. Accoceek wares (which overlap to some extent with Wolf Neck) were prevalent and dominated some sites. By contrast, Griffith notes that Accokeek is rarely seen in Delaware, so the divide between ceramic types must reflect a boundary between peoples. Griffith also sees Townsend pottery as wide-spread across the surveys and it dominates on the Wilke-Thompson Late Woodland sites, although concentrations were not dense. He feels that these likely were made by the Tockwogh and Wicomiss (Ozinies). What surprised him, however, was the appearance of large

amounts of Minguannan pottery in the area near Still Pond and Churn Creek. This was expected for 18KE29, the Arrowhead Farm site, but the pattern also was seen in two other sites, 18KE25 and 18KE71.

The general area of interest is shown in Figure 7.3, although specific site locations are not shown, in compliance with Maryland Historical Trust guidelines. 18KE29 is the site re-visited by Custer (ND), on Kinnaird Point. 18KE25 is located on Andelot Farm, across Churn Creek from the Arrowhead Farm site (18KE29). Wilke and Thompson characterized it as a short-term camp. A bit farther to the east, also on Churn Creek, lies 18KE71, classified by Wilke and Thompson as a short-term resource procurement camp.

Figure 7.4 Pipe fragments from 18KE29 (photo courtesy of Daniel Griffith)

Figure 7.5. Pipe fragments from 18KE71 (photo courtesy of Daniel Griffith)

The sites are relatively close together, although one is separated from the others by water (Churn Creek), and Minguannan wares dominated on all three. According to Griffith (2022), the exterior of the Minguannan pottery in these assemblages is smooth, but with a fabric-impressed interior. It is thin, hard, and was fired in a reduced oxygen environment. In contrast, pipe fragments from 18KE29 and 18HK71 (Figures 7.4 and 7.5) were fired in an oxidized environment, reflecting different techniques that might be related to variables such as the tribal and geographic origin of the potter, gender, or some other factor. These pipes and other materials in the assemblages point to a Contact period occupation.

Figure 7.6. Miguannan pottery from site 18KE29 (photo courtesy of Daniel Griffith)

The dominance of Minguannan pottery (Figure 7.6) on these three sites leads to some interesting questions. The assemblage as a whole suggests a date that is late in the Contact period. The scarcity of Minguannan ware elsewhere in the two watersheds, and the prevalence of Townsend wares, suggests that we may be dealing with two different peoples and traditions, one making Townsend wares for a long period throughout the watersheds, and another that appears much later, making Minguannan wares. Townsend must have been made by the original Algonquian inhabitants of the region. At Contact, that would have been the Tockwogh and Wicomiss. Given the regional distribution of Minguannan, it was likely made by the Delaware, and its presence here seems almost certainly to have been due to the movement of people, perhaps after the Tockwogh had moved out (likely forced away by the Susquehannock), late in the chronology. As we have seen, the period from 1608 to the 1660s was dynamic in terms of inter-tribal relations and the relationship between Native peoples and the newcomers from Europe (English, Dutch and Swedish). Based on the accounts of de Vries (1655) and others, the Susquehannock (Minqua) were not simply moving south into the Chesapeake, but also raiding to the east in the 1630s and perhaps earlier, into Delaware/Lenape territory. This was

probably to gain access to Dutch and Swedish trade. In the process, they were at least temporarily displacing people. The de Vries account indicates the displacement of a group of the Armewamus Lenape into the interior of southern New Jersey in response to a 1633 Susquehannock raid. Could the Minguannan materials at our three sites have been made and left by similar Lenape refugees from this or subsequent conflicts? If so, this could have been a temporary presence. Or is it possible that these materials reflect a return to the area by descendants of the Tockwogh or Wicomiss who had joined the Delaware and adopted their material culture? This seems less likely, but certainly the mention of a remnant Native population on Kent Island, apparently as late as the 1760s, in a Revolutionary War pension account serves as a caution against discounting a later Native American presence in this area. The natural resources along this part of the Chesapeake Bay shoreline were abundant, especially oysters, making this an attractive place to seek shelter. Alternatively, the return of descendants to honor their forbears must remain a possibility.

Jay Custer and teams from the University of Delaware have conducted a number of investigations in the project area over the years, some historic and others prehistoric (summarized in Custer 1989; also Custer *et al*. 1986; Custer 1990; Custer *et al*. 1996). Other survey work included several years of field surveys by Washington College, aimed at testing an archaeological predictive model developed by a team under the lead author of this study.

From 2004 to 2007, Seidel *et al.* (2004, 2007 and Seidel and Lowery 2008) developed an environmentally based GIS predictive model for a five-county area on the Upper Eastern Shore of Maryland, covering Cecil, Kent, Queen Anne's, Caroline and Talbot Counties. The model used indicators such as soils, slope, access to water, and known site location patterns, taking into account landscape changes over time and highlighting as high probability those areas with a high ecological diversity and correspondingly high access to resources. Twelve prehistoric settlement patterns were defined as particularly attractive to Native Americans:

- **Point Focus** – settlement on points of well-drained land, usually surrounded by water.
- **Cove Focus** – settlement around small estuarine coves or creeks
- **Converging Stream Focus** – settlement on knolls or terraces above the confluence of freshwater streams.
- **Springhead Focus** – settlement around active freshwater springs.
- **Interior Stream Focus** – settlement on ridges or terraces along freshwater drainage systems.
- **Sand Ridge Focus** – settlement along well-drained sandy ridges, usually aeolian in origin.
- **Bay Basin Focus** – settlement along well-drained rims surrounding shallow, poorly drained depressions.
- **Estuarine Wetland Focus** – settlement on knolls or ridges adjacent to or within broad marshes.
- **Rivershore Focus** – settlement on high ground along the major tributaries of the Chesapeake Bay, such as the Sassafras and Chester Rivers.

- **Bay Island Focus** – settlement on islands in the Chesapeake Bay; once part of the mainland, they were separated and turned into islands through marine transgression;
- **River Island Focus** – settlement on islands in the Susquehanna River; and
- **River Floodplain Focus** – settlement on the broad floodplains adjacent to the Susquehanna River.

The first nine of these settlement foci have wide distribution across the project area, while the last two are restricted to Cecil County, outside of the two watersheds, and the Bay Island Focus applies to islands in the Chesapeake Bay.

The predictive model initially was plotted on soil maps and then brough into the GIS. An example of the kind of base mapping and delineation that was done can be seen on Figure 7.7, which shows predictive zones plotted on Sheet 23 of the Kent County soils maps produced by the USDA (White 1982).

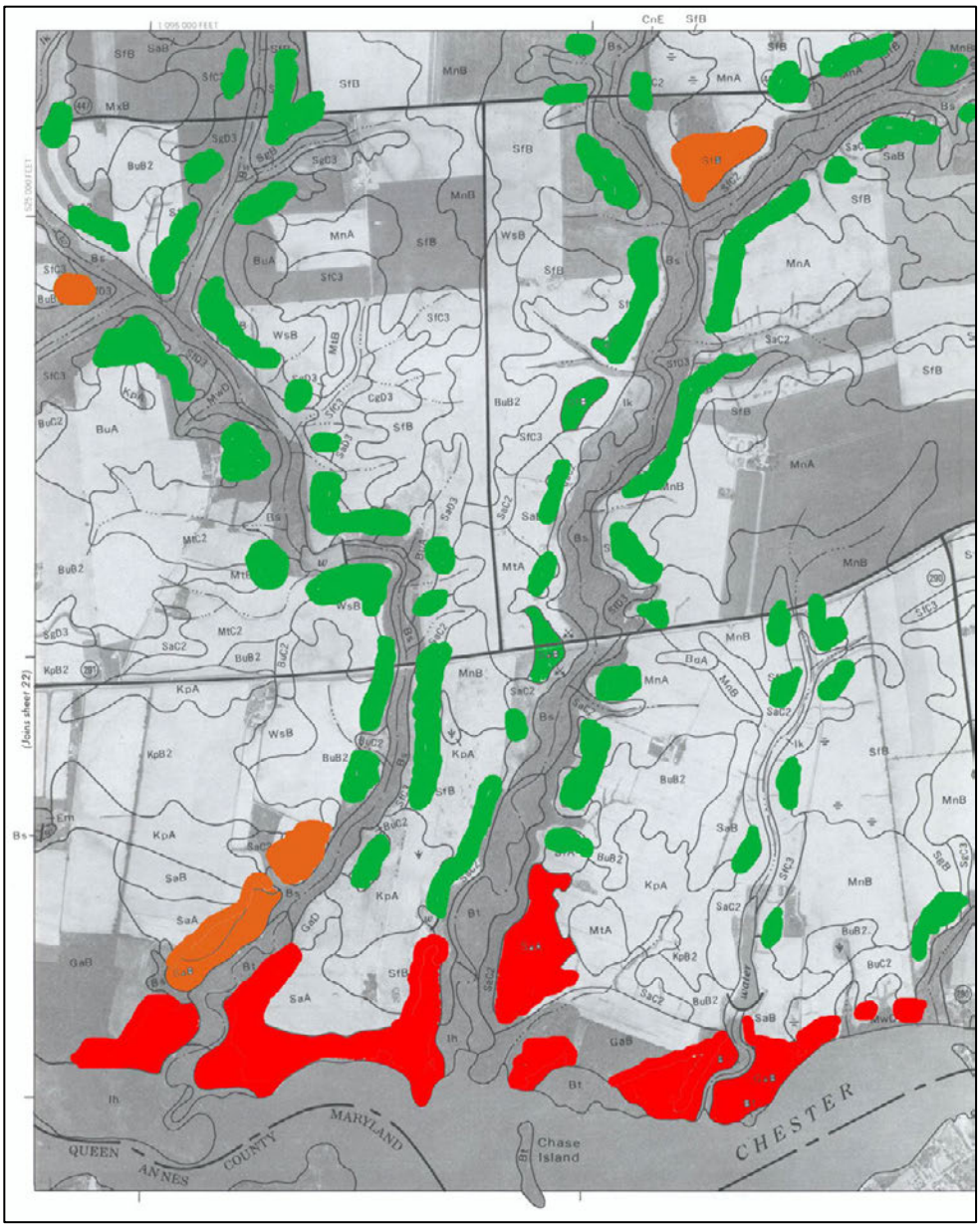


Figure 7.7. Predictive areas plotted onto Sheet 23 West, Kent County soil maps (red is extremely high probability, orange-brown are very high, and green are moderately high).

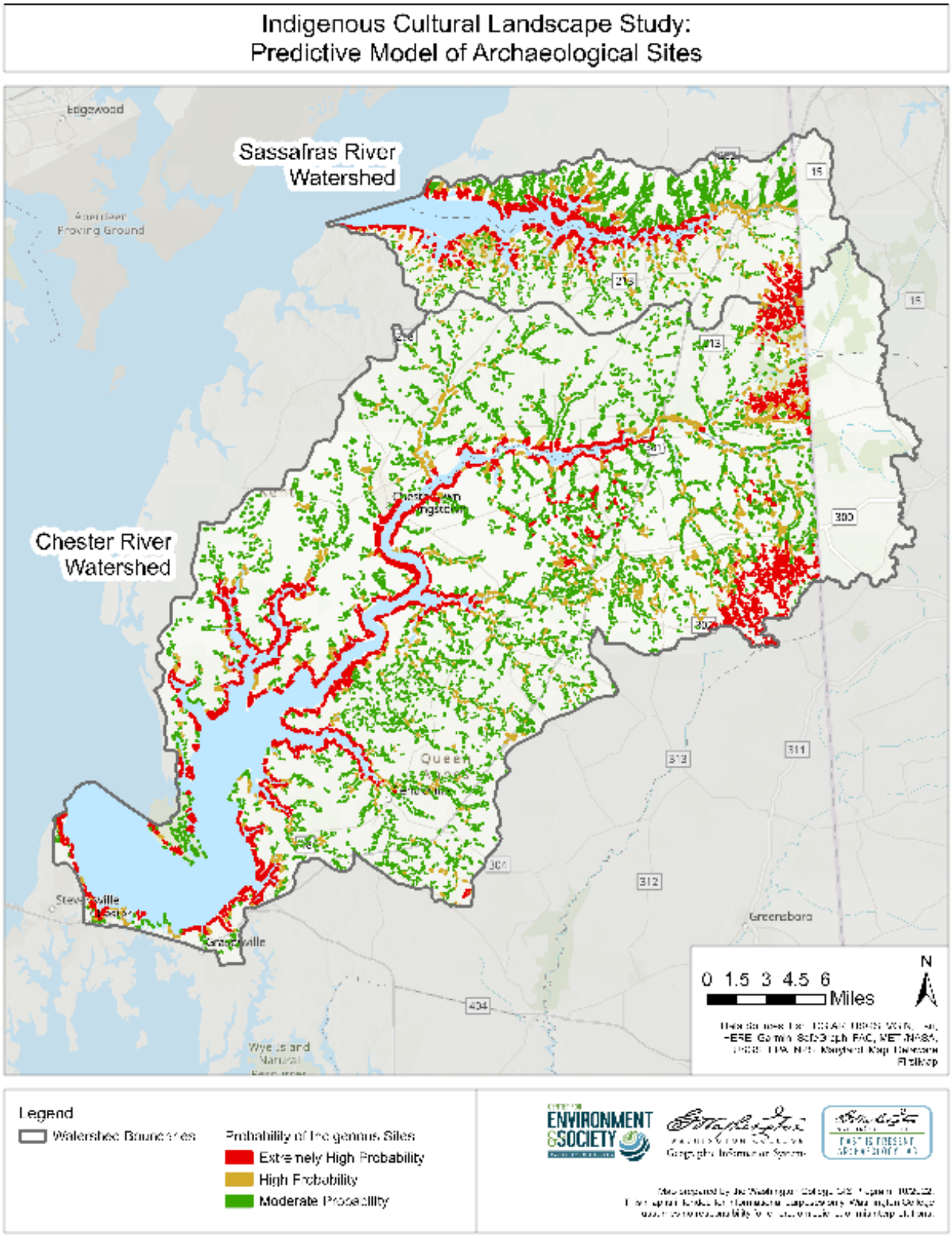


Figure 7.8. Archaeological predictive model for the Chester and Sassafras River watersheds.

Three significance levels are generated by the model: extremely high probability; high probability; and moderate probability. As explained in Seidel and Lowery (2008:10):

> The rationale for assigning probability levels of "extremely high", "high", and "moderate", as opposed to "high", "moderate", and "low" may not be immediately obvious, but has to do with resource management issues. The third level of significance highlighted in this model is thought to have a greater probability of holding archaeological sites than unrated areas, so it is not appropriate to term it "low probability." In addition, resource managers who are not familiar with archaeology may be tempted to write off any area classified as "low probability" as unimportant. But our knowledge of the past and ancient people's settlement patterns and activities is imperfect. Even where our understanding is robust, people today and in the past are sometimes idiosyncratic, and a site which is not where it "is supposed to be" may be rare, but it may nevertheless be significant. We therefore feel that it is inappropriate, from a management standpoint, to ever classify something as "low probability" if this means that it will be ignored.

The distribution of these priority areas across the current study area can be seen in Figure 7.8.

The preference of Native peoples for riverine shorelines is obvious through the distribution of red "extremely high probability" zones on the map. It also highlights the importance of Delmarva Bays and seasonal wetlands in the eastern end of the two watersheds, with three distinct concentrations. These zones correlate with Delmarva bay-basins, which are elliptical sand ridges that encompass seasonal wetlands. In an area with rapidly changing topography and soil types, a series of ecological "edges" is created, attracting an unusually wide range of plant and animal resources – and also people. Green areas, designated "high Probability," are less extensive but nonetheless important. Brown "moderate probability" zones tend to follow the interior tributaries. These distributions should not be taken to suggest that no activity took place in the uncolored areas. These could be important hunting grounds or areas of transit (especially the high ground that offered easier travel, but they were less likely to have seen settlement or intensive use.

The model was tested over a period of five years with comprehensive archaeological surveys in Kent County (primarily along the Sassafras, but also on Eastern Neck and the upper reaches of Langford Creek), and the results of blind surveys have been compared with the results predicted by the model. Testing of the model showed that a remarkable 86% of the sites found were located within areas designated as extremely high to moderate probability (Seidel and Lowery 2008; Seidel 2009; Seidel and Schindler 2012).

The predictive model, so far demonstrated to be a robust and reliable tool, clearly indicates the potential for a higher density of Native American occupation than has been previously uncovered along the northern shorelines of both the Chester and Sassafras Rivers. If one compares predicted zones on the south shoreline of the Chester River with reported

archaeological site locations in the Maryland's MEDUSA GIS, a high correlation is seen between predicted sites in the Indiantown Farm area (the possible site of Ozinies) and the known and recorded sites in that area. That congruence provides additional support for the notion that the model truly reflects Native American behavior. There are several reasons that this locale would have been particularly attractive to Late Woodland and Contact Period peoples, beyond the normal variables in the model. First, below this point the Chester River broadens out into Comegys Bight and the even wider stretch between the mouth of the Corsica and Langford Creek. In addition, the salinity of the river's water changes in this vicinity, and today oysters are not found upstream of this narrow stretch and Quaker Neck Landing.

This finally brings us back to the question of where the Ozinies and the towns of the Wicomiss were located, as well as the village of Tockwogh. Smith's depiction of a King's House (Figures 3.1 and 3.2) indicates that he believed there was a village somewhere in the vicinity of the Chester River. The National Geographic mapping done for the 400th anniversary of Smith's voyage placed Ozinies in the vicinity of present-day Rock Hall (and mistakenly suggested that Smith made landfall there). This follows the lead of Rountree, Clark, and Mountford (2007), based on archaeologist Wayne Clark's analysis. Keeping in mind that the Ozinies, as with other peoples in the region, were seasonally mobile, a Rock Hall location seems less likely for a major village location in 1608 because of its potential vulnerability to attack and its distance from headwater hunting grounds. A location father upstream is more consistent with our current understanding. The same is true of Tockwogh, which was fortified, and with good reason. It was frequently attacked by the Massawomeck. In their much lighter and maneuverable birch bark canoes, they could swiftly fall upon an enemy. Smith praised "their dexteritie in their small boats made of the barke of trees sowed with barke and well luted with gumme" (Smith 1986b:166). He further noted that the "Sasquesahanocks, the Tockwoughes are continually tormented by them [the Massawomeks]: of whose crueltie they generally complained" (Smith 1986b:166).

Had John Smith met the Ozinies and talked with them, it is likely that they too would have complained, as the Massawomek seem to have been the North American equivalent of Norsemen, striking quickly and then departing just as quickly, leaving the locals in their dugout canoes with little hope of catching them. The Ozinies would have been concerned about protecting their village, with its foodstuffs and women and children. The best vantage point from which to achieve this protection would have been some distance up a river (Tockwogh was seven miles inland). If an enemy came from the north (and this would cover both the Massawomeck and the Susquehannock), then the south side of a river would be best protected, inhibiting a stealthy approach over land. It would have been much easier to see and defend against an enemy approaching by water. As William Strachey noted regarding the Algonquians of Virginia, their towns were "…for the most part by the rivers…commonly upon the rise of a hill, that they may overlook the river and take every small thing into view that stirs upon the same" (Strachey 1612, in Haile 1998:635). Indiantown Farm, with its location inland on the south side of the river and the presence of period trade beads and abundant Late Woodland pottery, seems at least as likely a candidate for Ozinies as any other site.

The Tockwogh as a people seem to disappear from the record after Smith's contact with them. As the Susquehannock sought to encourage trade with the English and force out any middlemen, the Tockwogh probably were pushed aside and forced to move elsewhere. Also fleeting in their historical visibility are the Monoponson. As we have seen, the Wicomiss, presumably one and the same as the Ozinies, managed to stay on the Chester for several decades after Smith's voyage, coming into frequent contact with English traders and settlers. They reportedly traded with Kent Island through the 1630s and 1640s. If they "lived a 'small days journey' upriver" (Davidson 1993:142; see also Marye 1938b), that would place them near Indiantown Farm. In 1642, ostensibly due to a Native American attack on Kent Island, Maryland went to war against the Wicomiss, the Susquehannock, and the Nanticoke. The war on the Nanticoke was soon suspended, but hostilities with the Wicomiss and Susquehannock continued for some time. A previously noted, by 1648, it appears that the Wicomiss were under the control of the Susquehannock, who made peace with the English in 1652. But all references to the Wicomiss after about 1650 place them south of the Choptank River, in Nanticoke or Chicconese territory. The Susquehannock at that point controlled the region from the Sassafras to the Choptank (Davidson 1993:89-93), including the Chester River drainage. The Susquehannock themselves were unable to hold on to the Chester for long, giving way to the English (and to some Dutch and Swedish settlers from the Delaware Valley) in the 1660s, thus ending the long American Indian presence on the river.

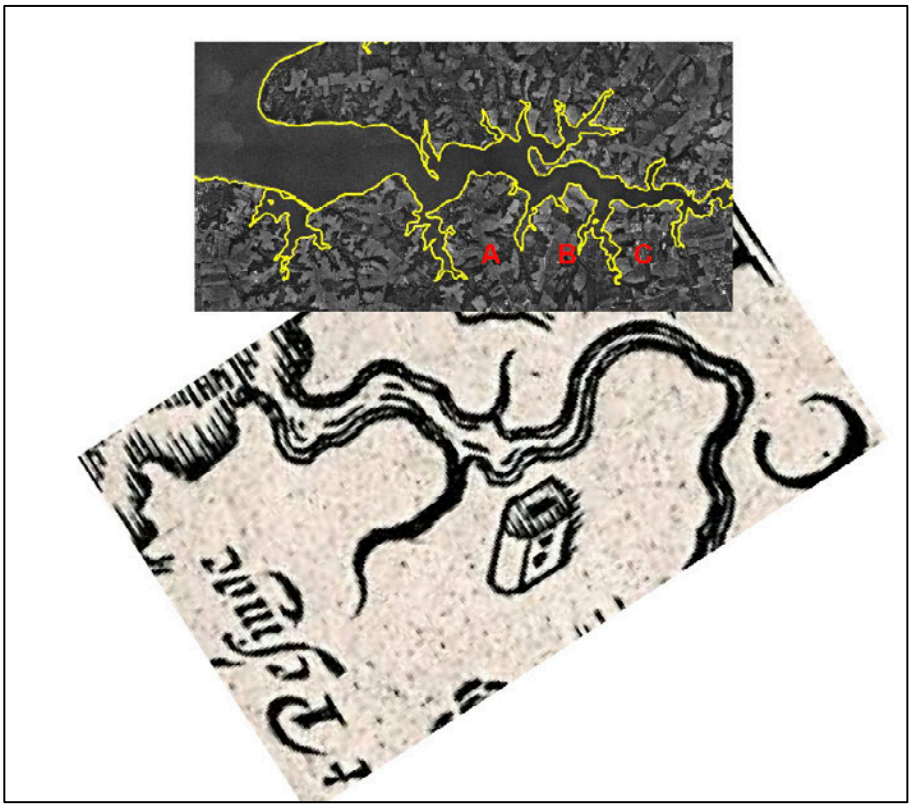


Figure 7.9: Modern aerial (top) showing the Sassafras River, with Smith map excerpt below - "A" is Shrewsbury Neck; "B" is Shallcross Neck; "C" is Starkey Farms (from Seidel and Lowery 2008).

Where then was Tockwogh? It has remained elusive. Based on Smith's description and the patterns of the Algonquians explored throughout this study, it must have lain up river from the mouth some short distance, situated on the south shore with good sight lines to the west. It would be located on somewhat higher ground off the river bank, but with easy access to the water and a sheltered place to draw canoes up to the shore and to haul materials – food stuffs, plants materials, and trade goods – up the bank and into the village. Three peninsulas on the southern shoreline of the Sassafras seem most probable (Figure 7.9), and each was partially surveyed by Washington College in 2005-2007; site locations and distribution maps cannot be replicated here due to site-security concerns, so the reader is referred to the site report on this work (Seidel and Lowery 2008) for such details.

The first and perhaps most likely is Shrewsbury Neck, the neck of land bounded by Turner Creek on the west and Freeman Creek on the east (peninsula "A" on Figure 7.9. The area where present-day Kentmore Park is located is one possibility. The high ground just to the west of the development offers a long and straight view down the Sassafras. Both Wayne Clark and the lead author of this study have interviewed residents of Kentmore Park, seeking any information they might have on eroding artifacts, ground disturbance that revealed artifacts or features, or any other local knowledge that might offer clues, to no avail. The presence of housing has precluded traditional surface survey techniques, and the area therefore remains largely unexplored. It also is possible that a village was located on the east side of the neck. In the 2005-2009 Washington College surveys to ground-truth the predictive model, this was one of the few properties for which access could not be obtained. That survey coverage did not extend north of Glencoe Road and was restricted to the east side of the north-south Rt. 444. Seven sites were found: on one, the bulk of the lithics could not be dated, aside from a single Early Archaic point; another site has Late to Terminal Archaic materials; three sites dated from the Late Archaic to Early Woodland (one had a few isolated historic artifacts); and two sites were related to 19th to early 20th C. structures. No Late Woodland or Contact period materials were encountered.

The second neck is Shallcross Neck, just to the east, bounded on one side by Freeman Creek and on the other by Woodland Creek. Washington College surveys identified only two sites here, but the relative paucity of sites observed on this neck may be more a reflection of poor survey conditions than a true absence of archaeological remains. The larger of these sites (13.7 acres) seems to have as its core a small lithic scatter identified by Wilke and Thompson, but this survey illuminated a larger area, dating primarily to the Middle to Late Archaic periods. A few widely scattered historic artifacts were seen, but these were 18th C., as opposed to Contact period or 17th C. The second, smaller site (1.2 acres) held only Late Archaic materials.

Finally, the next neck to the east, identified in our surveys as Starkey Farms after the current owner, is defined by Woodland Creek and Dyer Creek. There is no question that this was a good location, and survey revealed 16 sites. The chronological associations (Seidel and Lowery 2008) are summarized in Table 7.4.

Table 7.4. Sites on Starkey Farms Neck (Seidel and Lowery 2008)

No. of Sites	Temporal Affiliation
2	Middle Archaic
2	Middle Archaic to Middle Woodland, with a hint of Late Woodland
1	Late Archaic site with some scattered historic materials
3	Late Archaic to Early Woodland, one with a possible Late Woodland component and another with historic occupation from 18th-early 20th C.
1	Early Woodland site
2	Late Woodland sites, oddly having no ceramics; one of these also had a late 17th C. component
1	19th C. cemetery
4	no temporal diagnostics; one of these also had an 18th- early 19th C. component

What is striking about these sites is the scarcity of Late Woodland materials and absence of early 17th C. artifacts. In fact, none of these surveys on the three necks, or elsewhere along the Sassafras, identified any Contact period sites, and certainly no village. This may highlight the relatively low population numbers in the Late Woodland period, especially toward the Contact period, when population movements and pressure from the north and west made this an increasingly difficult area in which to thrive. However, Smith's account and map correlations make it clear that Tockwogh was somewhere in the vicinity and it would be well worth finding. The most likely location is somewhere on the north end of Shrewsbury Neck, either around today's Kentmore Park in the west, directly south of Kentmore Park on the west side of the peninsula, or in the unsurveyed northeastern side of the neck. The former offers striking views down the river from high ground, while the latter offers several very sheltered landings for canoes, on the indented Sassafras shoreline and up Freeman Creek. The second possibility is Shallcross Neck, especially on the unsurveyed western side of the peninsula. The northern end of the neck was well-covered in 2005-2006, as was the area east of Rt. 444, so the priority for survey and testing would be the high land just to the east of the mouth of Freeman Creek.

The Washington College survey results as a whole, including additional work in the Langford Creek tributary to the Chester River, reinforces this conclusion and offers some other possibilities. The following assessment is drawn largely from Seidel and Lowery (2008:132-133). In addition to the light Late Woodland footprint along the Sassafras, relatively little Middle Woodland is evident throughout Kent County. This suggests that populations were relatively low in this region for a much longer time, perhaps stretching from the Middle Woodland through Contact. In contrast, sites from earlier time periods, especially the Late Archaic, are more abundant. Several possible explanations may be offered for this population shift, pointing to potential avenues for additional research. Environmental and subsistence changes may be part of the puzzle. In the Middle Woodland, beginning about 1000 B.C., estuarine resources began to play a much more important role in subsistence, especially shellfish (Dent 1995; Miller

2001). Although the thicker forests of that time (compared to today) may have soaked up more run-off and increased salinity levels in the upper portions of the Chesapeake Bay, it probably was not salty enough to support oysters up the Sassafras River. This is confirmed by the scarcity of shell middens along the Sassafras, and this may have made the area somewhat less attractive. On the other hand, the area had adequate soils for horticulture, including maize production. Rountree *et al*. (2007:154, 233-234) discuss the importance of waterfront soils that have adequate nutrients to support corn and warm up early enough in the spring to give a head start on the growing season. In the Sassafras area, these are Matapeake and Sassafras loams. There are plenty of these soils up-river on the Sassafras, especially in the vicinity of Starkey Farms, which may explain the slightly larger number of Late Woodland sites in that area, compared to Shrewsbury Neck or Lloyd Creek. Maize would have been supplemented by native plant foods such as tuckahoe (arrow arum), which were abundant along the Sassafras.

An alternative explanation, or supplemental factor, may have to do with trade and exchange. Evidence for trade networks increases in the Middle Woodland, and Adena and Hopewell influences have been associated with this time period. Over time, trade in shell – especially whelk and Marginella – grew increasingly important, but the source for these materials was farther south. Rivers were used as highways for trade through this region, and rivers to the south, such as the Choptank, cut far inland and closer to the Atlantic sources of shell on the southern Delmarva peninsula. Although the Sassafras River and the overland trails discussed previously provided a quick route toward the Delaware Bay, this was too far north to provide ready access to these specific resources. If this hypothesis is correct, we might expect to see an increased frequency of Late Woodland sites to the south, and the experience of the authors suggests that they are indeed more abundant, even on the south shore of the Chester River. This intuitive sense seems to be borne out by the state inventory of recorded sites.

Table 7.5: Late Woodland & Contact Period Sites in Kent, Queen Anne's & Talbot Counties (Seidel and Lowery 2008:133)

County	**Number of Recorded Prehistoric Sites**	**Number of Late Woodland or Contact Sites**	**Percentage Late Woodland or Contact Sites**
Kent	363	26	7.2 %
Queen Anne's	965	92	9.5 %
Talbot	353	53	15.0 %

An analysis of previously recorded Late Woodland sites along the Kent County side of the Chester River shows a paucity that is similar to that on the Sassafras. In the stretch from Eastern Neck Island up to Chestertown, including Langford Creek, only 5 Late Woodland or Contact Period sites are recorded. On the Queen Anne's County side, between Kent Narrows and Southeast Creek (just downstream from Chestertown), 35 Late Woodland or Contact Period sites are recorded (these numbers include sites within

approximately 2500 ft (750 m) of the shoreline). Queen Anne's County has seen more survey work than Kent, however, so as a comparison, all of the site data from Kent, Queen Anne's, and Talbot Counties were compared, as shown in Table 7.5.

This suggests that the frequency of Late Woodland and Contact Period sites does indeed increase as one moves farther south, with Talbot County having twice as many Late Woodland sites as Kent County. It would be interesting to compare these frequencies with those of Dorchester and Somerset Counties, as well as along the Choptank River, to see if this is a pattern that holds up over a larger area.

CHAPTER 8
MAPPING THE INDIGENOUS CULTURAL LANDSCAPE

The foregoing review of geography, environment, resources, cultural history, and ways of life offers the data, context, and background necessary to define the indigenous cultural landscape of the Chester and Sassafras River watersheds. The process of defining and mapping the ICL is now to: (A) assemble this context through history and archaeology; and then (B) combine it and other spatial data in a Geographic Information System (GIS) for visualization and manipulation. That allows us to see where the greatest opportunities and threats to the resources and the landscape lie.

Geographic Information Systems

GIS is a technology and tool that allows virtually any data with spatial dimensions to be better understood and visualized. It uses a software platform to combine different kinds of data – for example, soils, vegetation, animal species, and known archaeological sites – to look for patterns and relationships, and to better visualize these relationships. Depending upon the nature of the problem and the data, GIS can allow statistical analysis of these data and relationships. GIS is open-ended, in the sense that new and updated information can always be added. In pursuit of visualization, data are put into "layers" that can be turned on and off at will. For example, a series of historic maps can be imported in the GIS as separate layers, "georeferenced" to make sure that they align with a modern-day base map, and then viewed separately or as overlays on today's landscape. The kinds of data that can be used and the variety of analyses are almost endless. In addition to offering a powerful analytical and visualization tool, GIS can be a flexible management tool. For example, the plans for proposed projects that might disturb the ground, such as a new building or highway, can be imported as a layer and then compared with information on sensitive environmental zones or significant archaeological sites to avoid disturbance or destruction. These attributes make GIS the perfect tool with which to conceptualize the boundaries of an ICL and to then manage that ICL in the future.

Data Sets

The types or layers of information incorporated into the Chester and Sassafras ICL are summarized in Table 8.1. Additional data will be added in the future.

Table 8.1. ICL GIS data layers

DATA LAYER NAME	SOURCE
Anchor Properties (Selected Important Protected Lands)	Created by the Washington College GIS Program using parcel data from Kent County, MD; Queen Anne's County, MD; Cecil County, MD; and MD iMAP
Archaeological Phase I Survey Areas	MD Historical Trust
Bathymetry Contour Lines (m)	MD iMAP
County Boundaries	MD iMAP, DE FirstMap
DE Forest Cover	DE FirstMap
Delaware Imagery (2017)	DE FirstMap
ICL Recommended Boundary	Created by the Washington College GIS Program, based on the Chester River and Sassafras River watershed boundaries from the USGS Watershed Boundary Dataset
Maryland Six Inch Imagery (2019)	MD iMAP
MD Coastal Resiliency Assessment - Shoreline Hazard Index	MD iMAP
MD Forest Cover	MD iMAP
Municipalities	MD iMAP, DE FirstMap
Predictive Model of Archaeological Sites	Created by the Washington College GIS Program
Protected Lands (Clipped to the Chesapeake Bay Watershed)	Chesapeake Bay Program
Protected Lands (On Current Basemap Only)	MD iMAP, DE FirstMap
Public Water Access Points	MD iMAP
Public Water Trails	MD iMAP
Roads	MD iMAP, DE FirstMap
Soils (Queried for Sandy Loam and Fine Sandy Loam, 0-2% Slope)	MD iMAP, DE FirstMap
Soils For Maize Cultivation (Queried for Sassafras and Matapeake of Loam, Sandy Loam, and Fine Sandy Loam, 0-5% Slope)	Created by the Washington College GIS Program using data from MD iMAP and DE FirstMap, and research from Rountree and Davis (2008)
Topography Contour Lines (m)	Created by the Washington College GIS Program using LiDAR data from MD iMAP and DE FirstMap
Washington College River and Field Campus Experimental Grasslands	Washington College Natural Lands Project
Washington College River and Field Campus Property Boundary	Washington College Natural Lands Project
Water (Includes rivers, streams, and lakes)	MD iMAP, DE FirstMap
Watershed Boundaries	USGS Watershed Boundary Dataset: 10-digit Hydrologic Units

A series of historic maps also were digitized and georeferenced; these are itemized in Table 8.2.

Table 8.2. Historic map layers in the ICL GIS.

YEAR	AUTHOR	NAME	SOURCE
1612	Smith, John	Virginia	https://www.loc.gov/resource/g3880.ct000377/
1670	Herman, Augustine	Virginia and Maryland as it is planted and inhabited this present year 1670	https://jcb.lunaimaging.com/luna/servlet/detail/JCBMAPS~1~1~1192~115902426:Virginia-and-Maryland-As-it-is-plan?qvq=q%3AHerman%3Bsort%3Anormalized_date%2Cfile_name%2Csource_author%2Csource_title%3Blc%3AJCBMAPS~1~1&sort=normalized_date%2Cfile_name%2Csource_author%2Csource_title&mi=5&trs=80&cic=JCBMAPS~1~1#
1700	Homann, Johann Baptist	Virginia, Marylandia et Carolina in America septentrionali Brittannorum industria excultæ	https://www.loc.gov/resource/g37093.ct003939/
1749	Evans, L & Hebert, L	A map of Pensilvania, New-Jersey, New-York, and the three Delaware counties	https://www.loc.gov/resource/g3790.ar103500/
1776	?	Map of the country between and bordering the Delaware River and Chesapeake Bay, showing roads to Philadelphia and localities	https://www.loc.gov/resource/g3791p.ar104400/
1786	Churchman, John	To the American Philosophical Society, this map of the peninsula between Delaware & Chesopeak bays, with the said bays and shores adjacent drawn from the most accurate surveys is humbly inscribed by John Churchman	https://www.loc.gov/resource/g3792d.ar137700/
1795	Griffith, Dennis	Map of the State of Maryland laid down from an actual survey of all the principal waters, public roads, and divisions of the counties therein; describing the situation of the cities, towns, villages, houses of worship and other public buildings, furnaces, forges, mills, and other remarkable places; and of the Federal Territory; as also a sketch of the State of Delaware shewing the probable connexion of the Chesapeake and Delaware Bays	https://www.loc.gov/resource/g3840.ct000307/
1801	Shallus, Francis	A map of the state of Delaware and the Eastern Shore of Maryland : with the soundings of the Bay of Delaware	https://www.loc.gov/resource/g3830.tr000188/
1877	US Coast & Geodetic Survey	Chesapeake Bay From Head Of Bay To Magothy River	https://www.historicalcharts.noaa.gov/image.php?filename=LC00136_06_1877
1886	US Coast & Geodetic Survey	Navigation Chart of the Chesapeake Bay from Head of Bay to Magothy River	https://www.historicalcharts.noaa.gov/image.php?filename=cp1235c

An example of the appearance of the GIS in a web application (allowing distant users to view and analyze project data) can be seen in Figure 8.1.

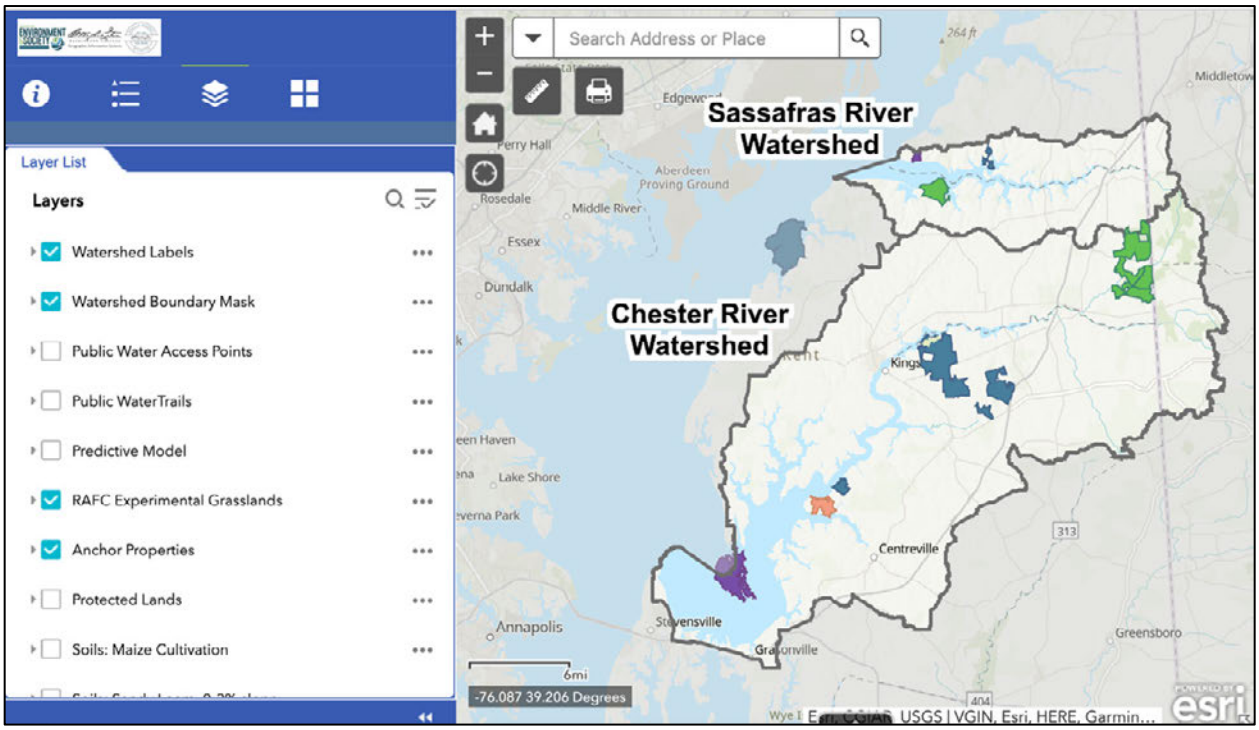


Figure 8.1. Sample screen from the ICL GIS web application.

In Figure 8.1, the map on the right-hand side shows the project area, with various tools in the upper left-hand corner of the map screen. To the left are various layers of data, and more layers become visible as one scrolls down. Checking a box next to a layer "turns on" that layer and makes it visible in the map screen. Layers can be turned on or off at will, allowing the user to see just one data set, or to combine multiple data sets as desired. Figure 8.2, for example shows aerial imagery that gives an indication of land-use and vegetation. Two data sets are used, 2019 imagery of the Maryland portion of the project area and 2017 imagery for the Delaware. At this scale, however, its utility is limited, so the user can "zoom in" to any part of the map in order to see more detail (Figure 8.3).

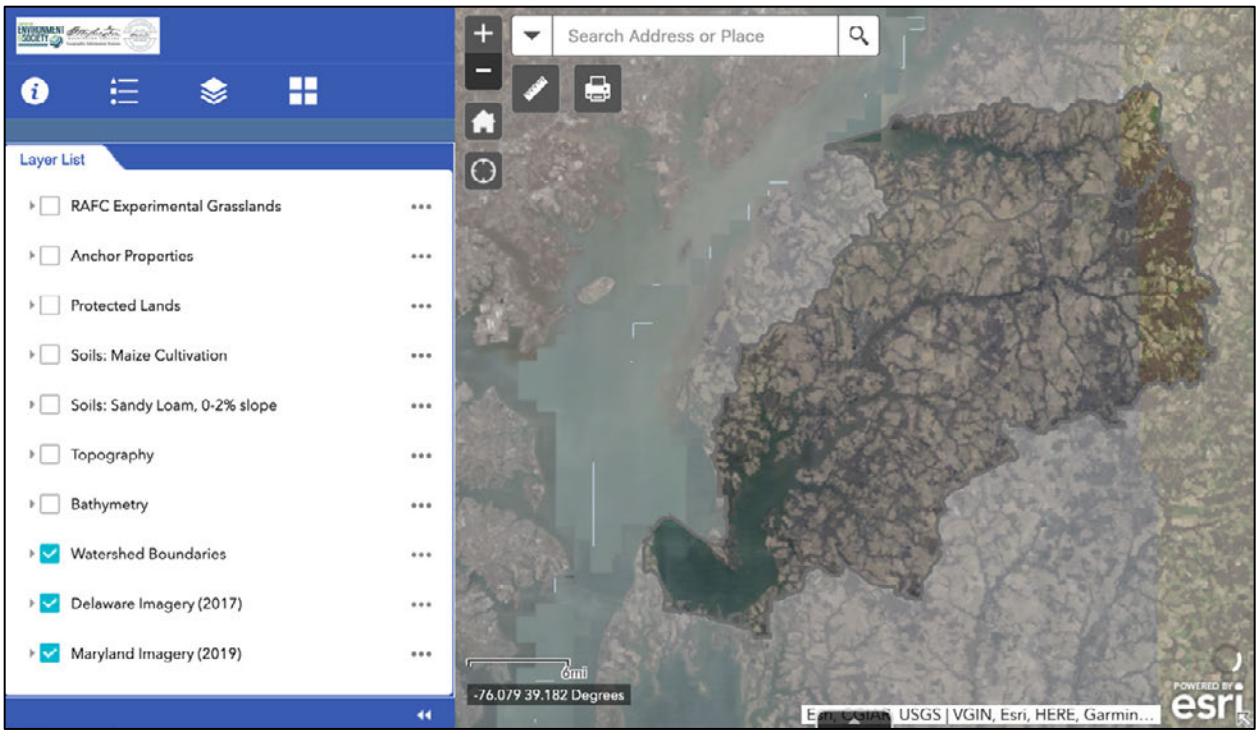


Figure 8.2. Aerial imagery in the ICL GIS.

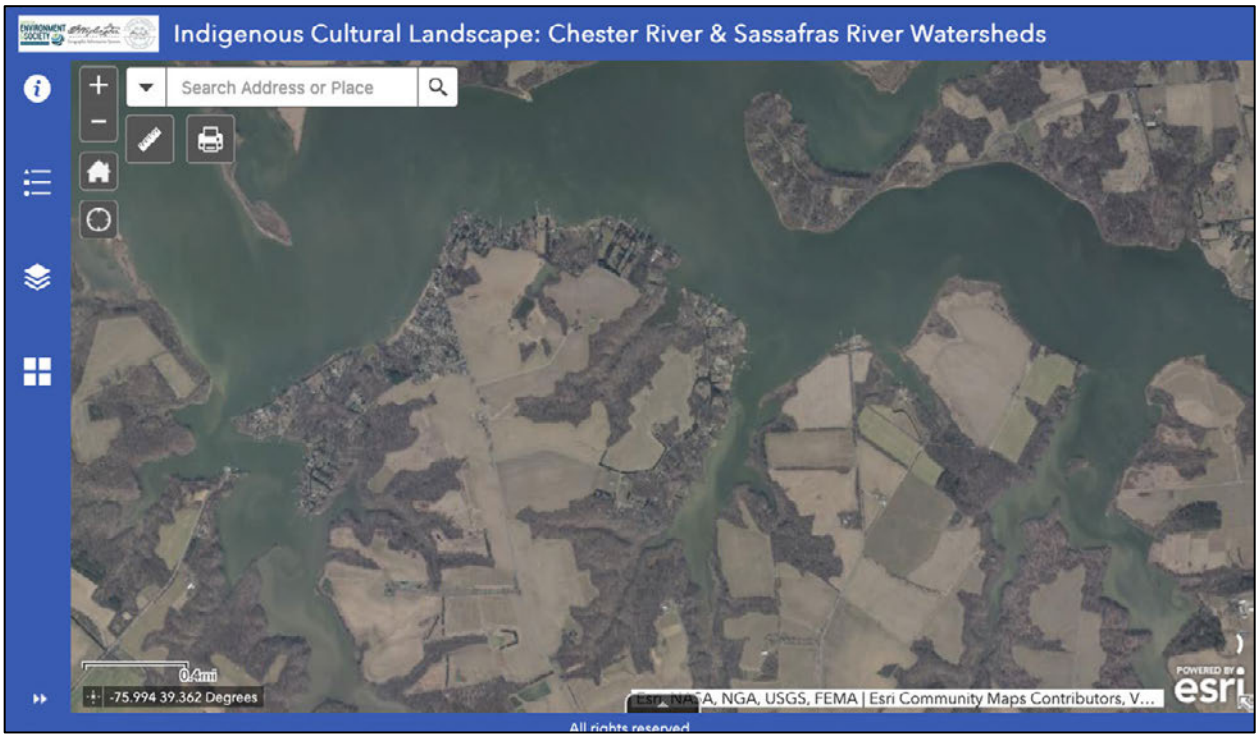


Figure 8.3. Aerial imagery of Shrewsbury Neck (center left) and Shallcross Neck (center right) on the Sassafras River (the data layer window has been minimized to widen the field of view).

Data Visualization & Defining the ICL

In shaping an ICL, some variables are fundamental to human behavior, such as soils and topography. Two GIS-generated soil maps have already been shown in a previous section of this report (Figures 6.4, 6.5) and topography via contour lines has been depicted in Figure 1.4. But for any variable, there may be different ways of visualizing it. As an example, Figure 8.4 shows topography in terms of shaded relief.

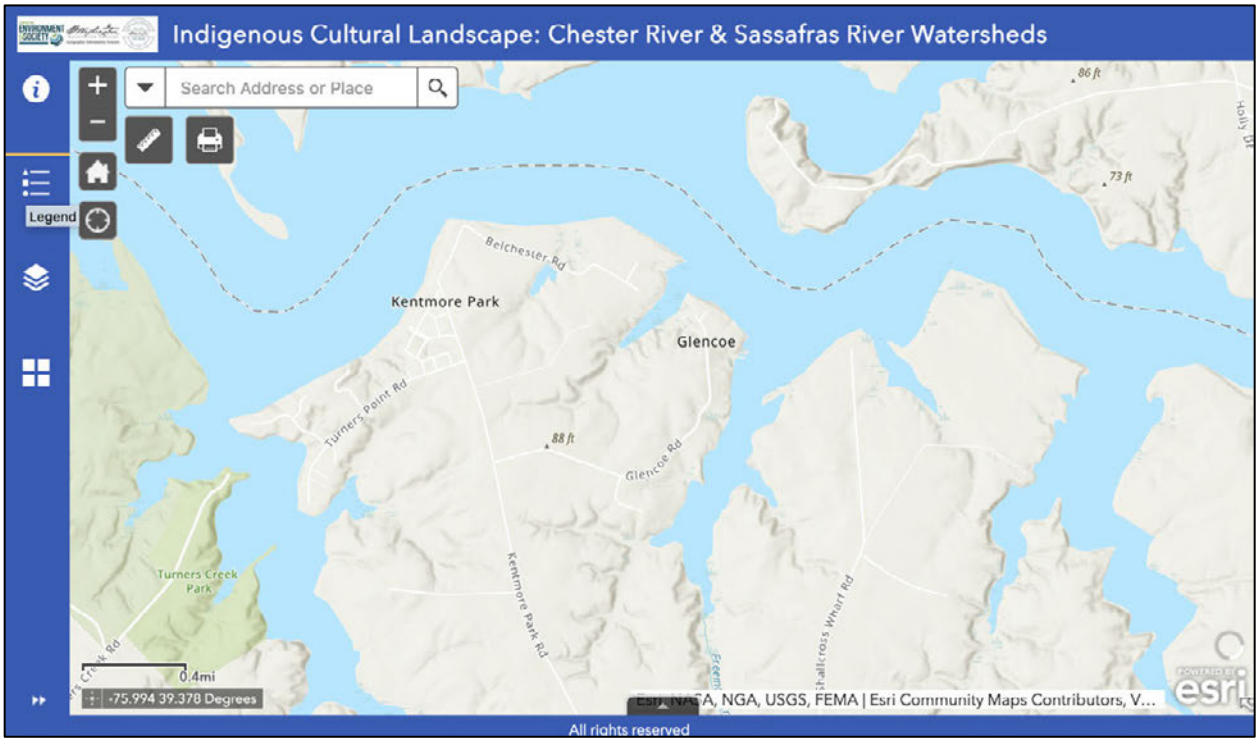


Figure 8.4. Topography of the Shrewsbury and Shallcross Necks shown via shaded relief.

Archaeological data also may be viewed via GIS. Drawing on the data from the Maryland Historical Trust's MEDUSA GIS, the extent of Phase I archaeological surveys in the study area may be seen in Figure 8.5. Figure 8.6 shows a closer look at Shrewsbury Neck, Shallcross Neck, and Starkey Farms on the Kent County side of the Sassafras River (the presumed location of Tockwogh). Most of these surveys were done by Washington College in its effort to test the archaeological predictive model. The sinuous surveys hugging the shoreline show areas surveyed by Wilke and Thompson. Surveys in the river itself were conducted by the Maryland Historical Trust underwater archaeology division.

The Maryland Historical Trust offers some caveats to these data. The mapping of a survey in the GIS does not mean that the entire area was truly surveyed, especially for the underwater surveys. They recommend that users consult the actual report for the methods of survey, details, and results, and then contact archaeologists at the Trust with any questions.

Specific archaeological site locations are not depicted, due to concerns that public accessibility might result in disturbance or looting.

Figure 8.5. Phase I archaeological surveys (data from the Maryland Historical Trust MEDUSA GIS).

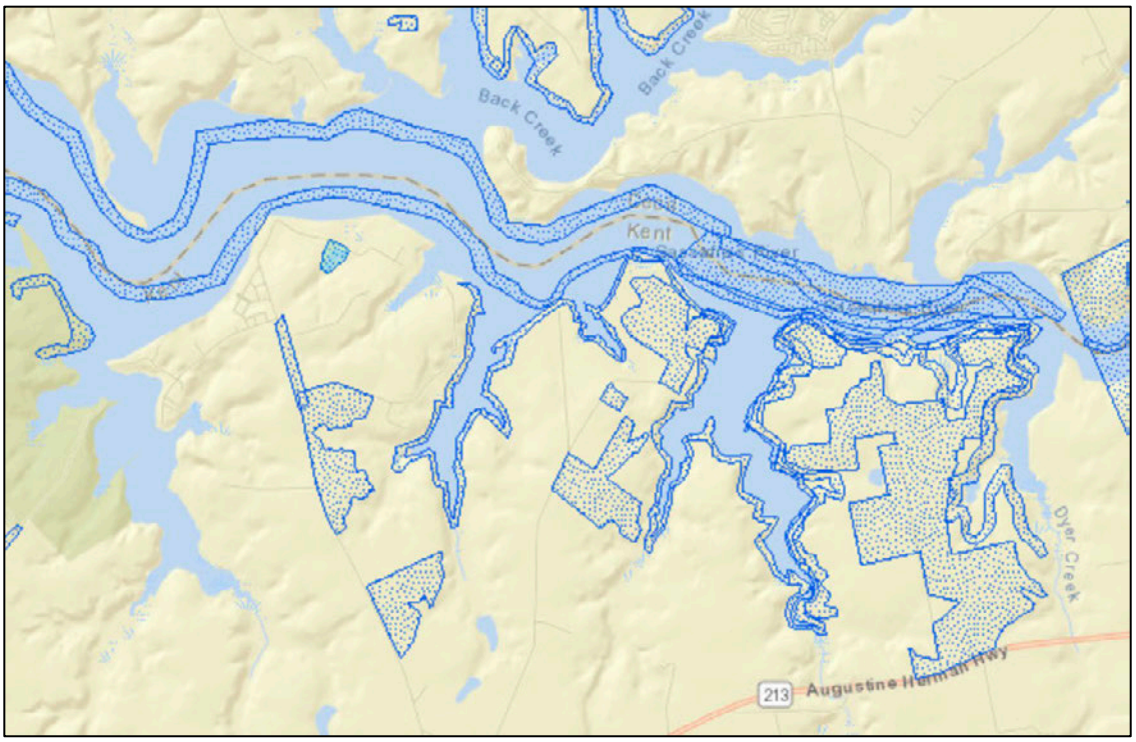


Figure 8.6. Phase I archaeological surveys on Shrewsbury and Shallcross Necks and Starkey Farms (data from the Maryland Historical Trust MEDUSA GIS).

In assessing an ICL, it is not simply environmental and archaeological evidence that are important. As we look at the contemporary uses of an ICL, issues like the extent of protected lands and public access are important. Data on such issues have been brought into the GIS. Protected lands are depicted in Figure 8.7, which makes it clear that a remarkable percentage of the land is protected, especially in Kent County. The types of ownership and protections accorded to land are varied. In the Chester and Sassafras GIS, the following types of protections have been considered:

- Federal government ownership – this offers protection to cultural resources under Section 106 of the National Historic Preservation Act.
- State owned lands – this offers protection under the state equivalent of the federal law, Section 106 of the Maryland Historical Trust Act.
- Local government ownership does not offer the same level of protections as state or federal control, but means that the land is in public ownership and less vulnerable to development.
- Non-governmental organizations – these may be land trusts, non-profit organizations, or other entities whose land typically is less vulnerable.
- Privately owned land under conservation easements may have a variety of restrictions put on them, sometimes under the purview of government and sometimes by other organizations.
- "Other" designates protected lands not covered in any of the categories above.

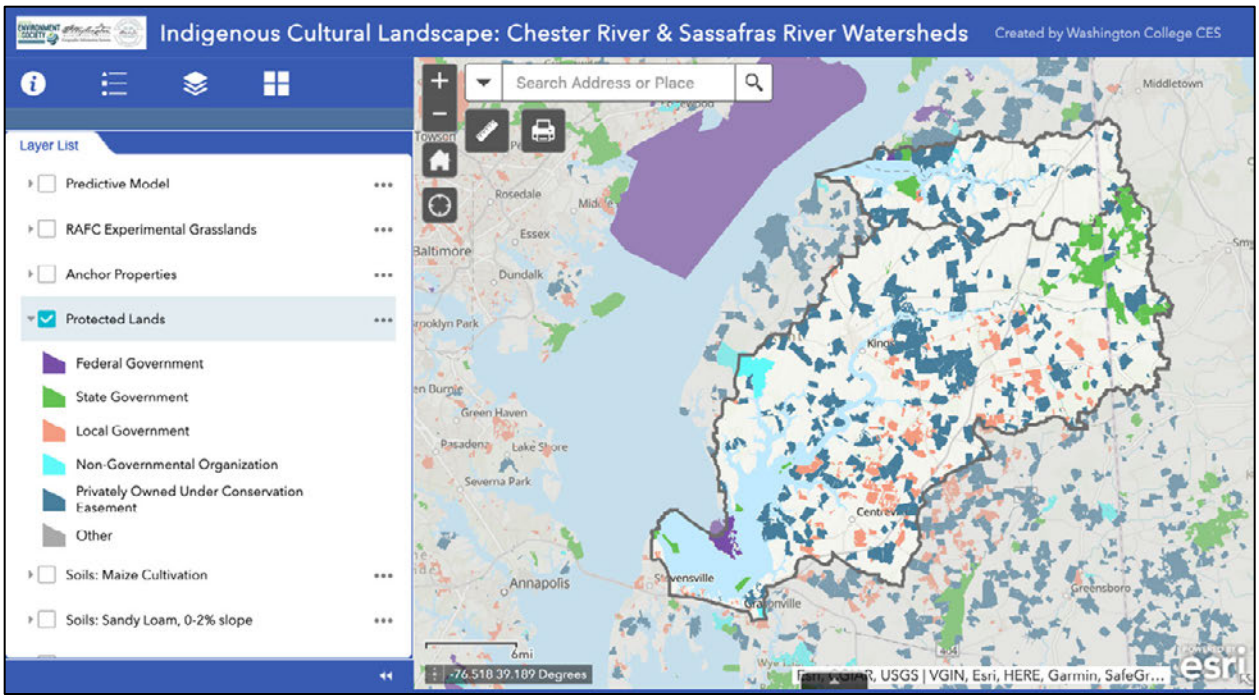


Figure 8.7. Protected lands in the study area.

Most of the publicly owned lands are accessible to the public, and all of the shoreline areas can be viewed by water, if one has a boat. Water access points and designated water trails in the study area are shown in Figure 8.8.

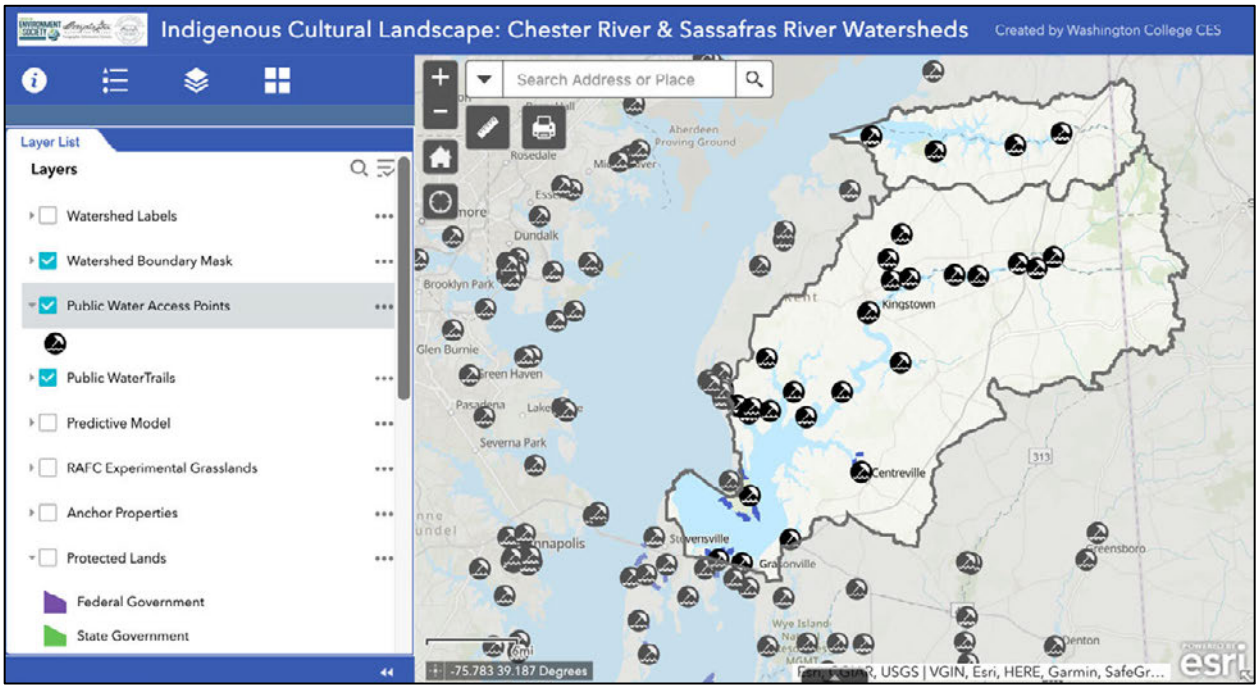


Figure 8.8. Water access and water trails.

As with many layers of the GIS, “clicking” on one of the water access icons will open a window connected to additional useful information, as seen in Figure 8.9.

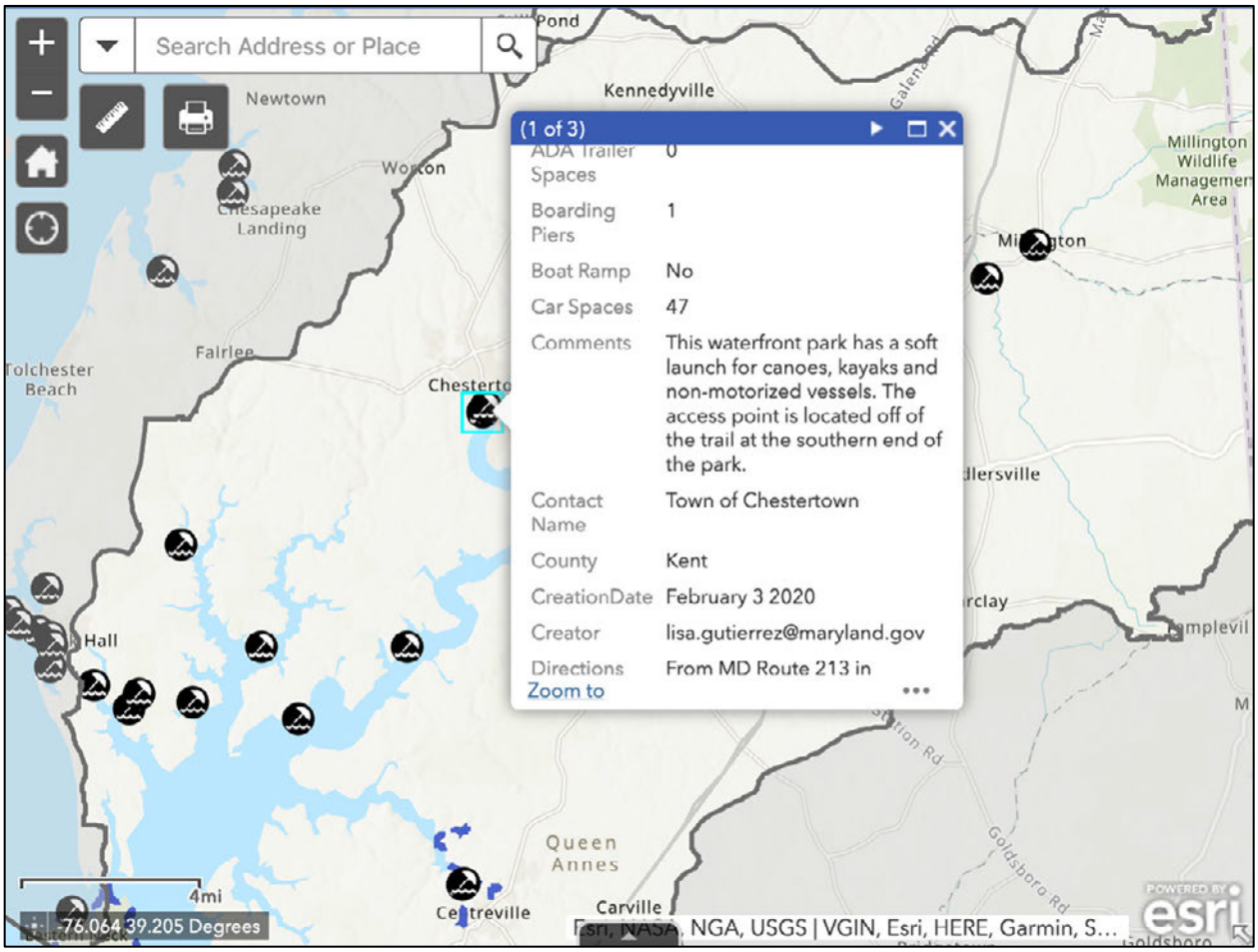


Figure 8.9. Information attached to specific locations.

In Figure 8.9, a description of a kayak landing is presented in the window associated with that location, and by scrolling down, one can find information on parking, ADA accessibility, ownership, owner or management contact information, visitor facilities, and directions to the location.

Any objective assessment of land preservation must conclude that the study area ranks highly in terms of the percentage of its land that is protected. A 2004 management plan for a four-county heritage area that encompasses most of the study area concluded that it has one of the last remaining well-preserved colonial landscapes in the nation (Eastern Shore Heritage 2004). A more recent assessment of Kent County makes a convincing case for the level of preservation and the unique nature of the area’s environmental and heritage resources, while

also thoroughly documenting the current scope and status of these resources (Kent Conservation & Preservation Alliance 2019).

All of these kinds of data come to bear on how an ICL might be defined. The ICL should meet the criteria established by the National Park Service (NPS 2011), reiterated here for convenience:

- Good agricultural soil (fine sandy loam, 1-2% grade)
- Fresh water source (river or creek water may be brackish)
- Transportation tributary adjacent
- Landing place (confluence of tributaries optimal)
- Marshes nearby (for waterfowl, shellfish, reeds, tubes, muskrat, turtles)
- Brushy areas (for small game, berries)
- Primary or mixed deciduous forest (for larger game, nuts, bark, firewood)
- Uplands that could support hunting activities (and a variety of wildlife)
- Proximity to known American Indian communities (documented through ethno-history or archaeology; may be post-Contact)
- Protection from wind
- High terrace landform

Criteria for smaller or connective parcels include:

- Areas of recurrent use for food or medicine acquisition (shell middens, plant gathering sites)
- Areas of recurrent use for tool acquisition (quarries);
- Places with high probability for ceremonial or spiritual use (even if not documented), or known by descendent community to have been used for ceremony;
- Trails used as footpaths (usually became colonial roads, sometimes are today's highways and local roads)
- Parcels that can be interpreted as supporting activities of Indian community sustainability, such as trading places or meeting places
- Places associated with ancestors, or part of a descendent community's past, known through tribal history, ethno-history, or archaeology

In addition, we have considered factors such as landscape and site preservation, public accessibility, and opportunities for interpretation and education.

Anchor ICL Properties

In something of a departure from other ICL investigations, we have defined nine critical anchor properties that are protected, have important archaeological and historical associations, and offer the best opportunities for interpretation and public visualization of the indigenous

cultural landscape. Four of these are in the Chester River watershed, three are in the Sassafras River watershed, and one anchor property is partially in both watersheds. The ninth and final anchor is technically outside of the watersheds, but close by and within the territory of the original inhabitants, lying on the Chesapeake Bay shoreline below the mouth of the Sassafras River. The location of these nine ICL anchor points are shown in Figure 8.10 and each is described below, starting at the mouth of the Chester River, then moving upstream to its headwaters, then moving to the mouth of the Sassafras and thence upstream. The last node, in the extended project area along the Chesapeake Bay, is then described.

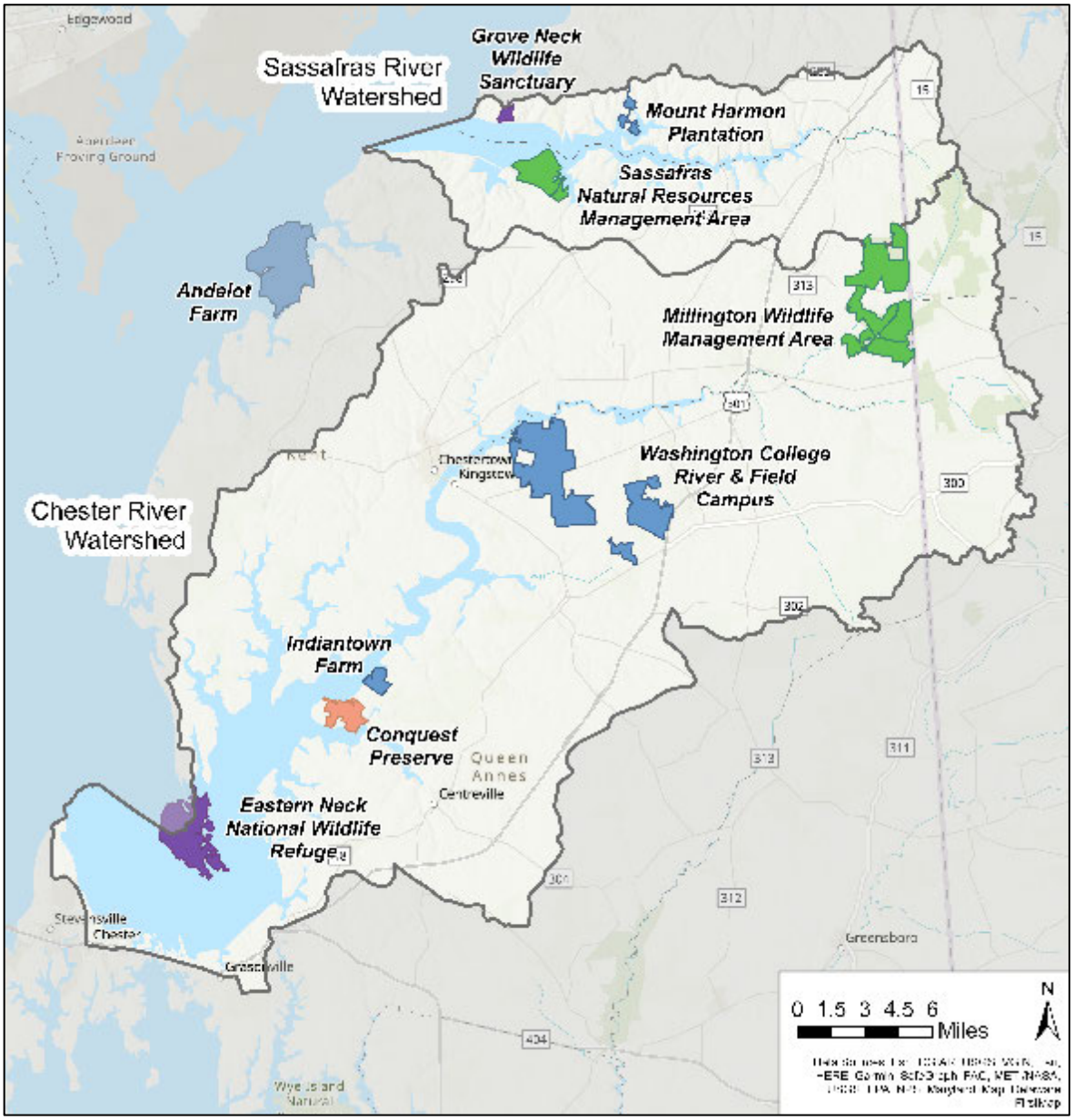


Figure 8.10. Anchor points for the ICL.

Chester River ICL Anchors

Eastern Neck National Wildlife Refuge is a federally owned property on the north side of the Chester River, at its mouth (Figures 8.11 and 8.12). The Refuge preserves 2,285 acres that gradually are being phased out of agriculture as wooded buffers are increased. By water or by land, the refuge is publicly accessible and protects a landscape that is full of wildlife, but also abundant archaeological resources from a wide time frame. Thirty-five archaeological sites have been recorded on the property, ten of which are Late Woodland. Hail Cove, around the southernmost point of Eastern Neck Island, hosts remarkably dense groupings of waterfowl in the winter and gives a glimpse of the former abundance of the region. Eastern Neck Wildlife Refuge provides a truly remarkable entry point to the Chester River, with countless opportunities to slip back in time to an earlier landscape.

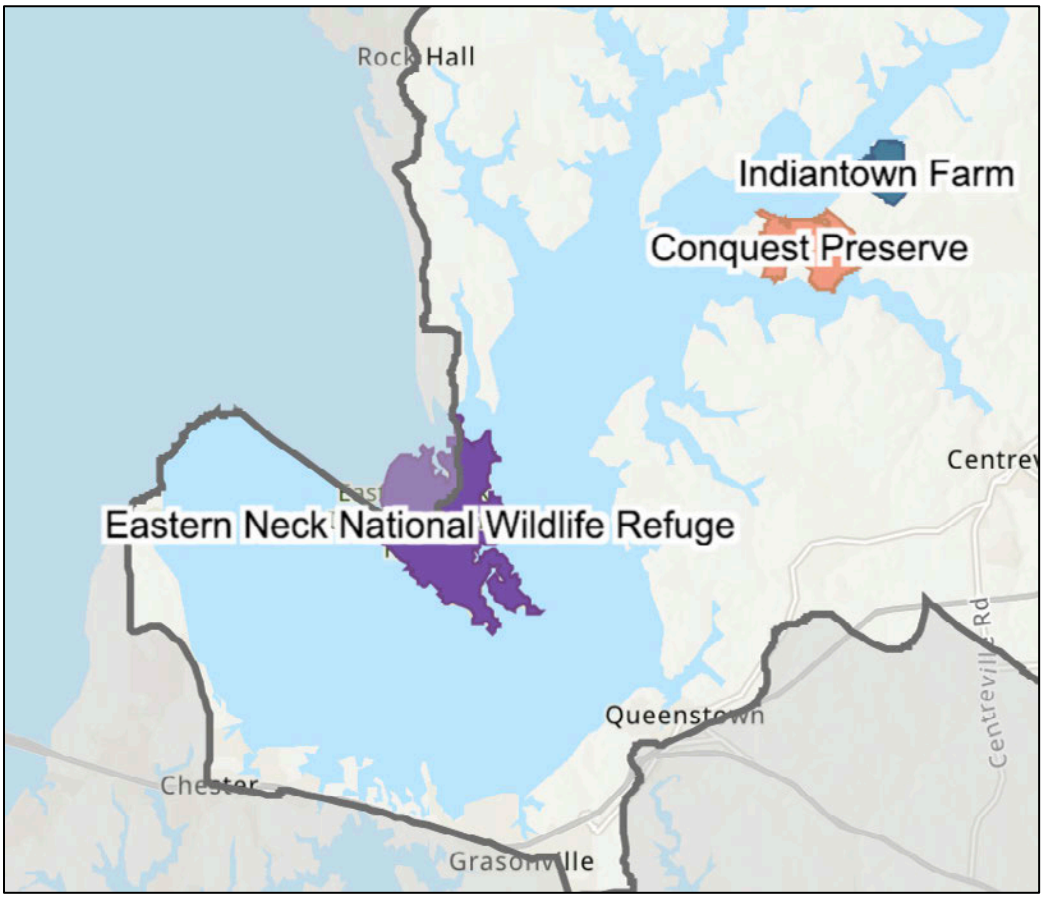


Figure 8.11. Location of three ICL anchor properties in the Lower Chester River.

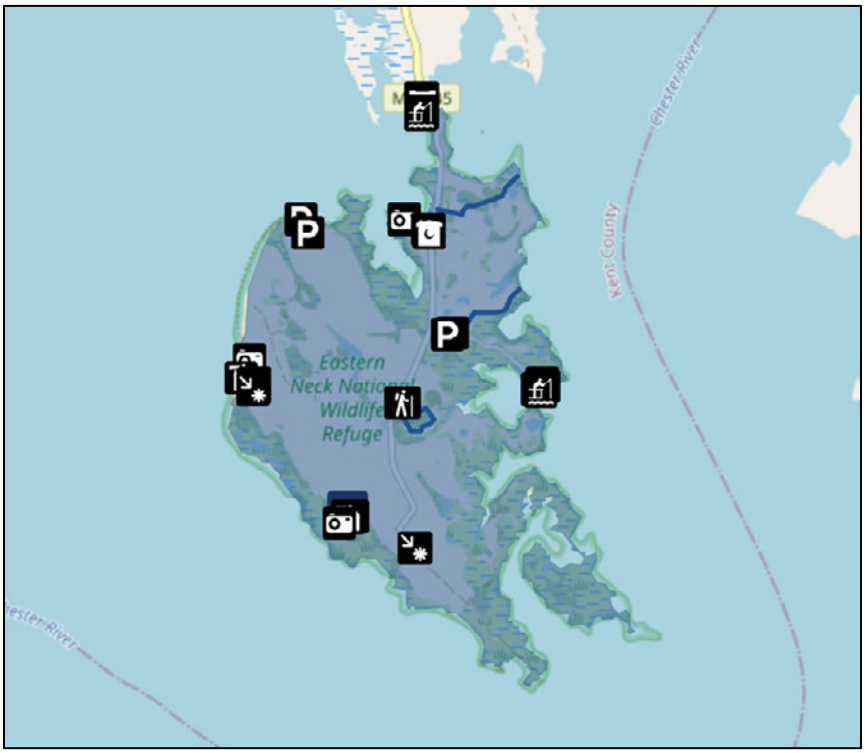


Figure 8.12. Eastern Neck Wildlife Refuge https://www.fws.gov/refuge/eastern-neck/map

Conquest Preserve is about 6 miles upriver from Eastern Neck, on a point between the Chester and Corsica Rivers (Figures 8.11 and 8.13). This 758-acre property is owned by Queen Anne's County. Significant portions of the preserve were designated by the archaeological predictive model as having extremely high and high probability for archaeological remains, including nine shell middens. The Natural Lands Project of Washington College's Center for Environment & Society recently completed a large habitat restoration project on the Preserve, installing 125 acres of meadows, 38 acres of wetlands, and 38 acres of forest. The meadows are native, warm season grasses that are like those encouraged by Native peoples in the region. The trails and public amenities allow easy public access (also accessible by boat to Conquest Beach) and self-guided tours (Figure 8.13).

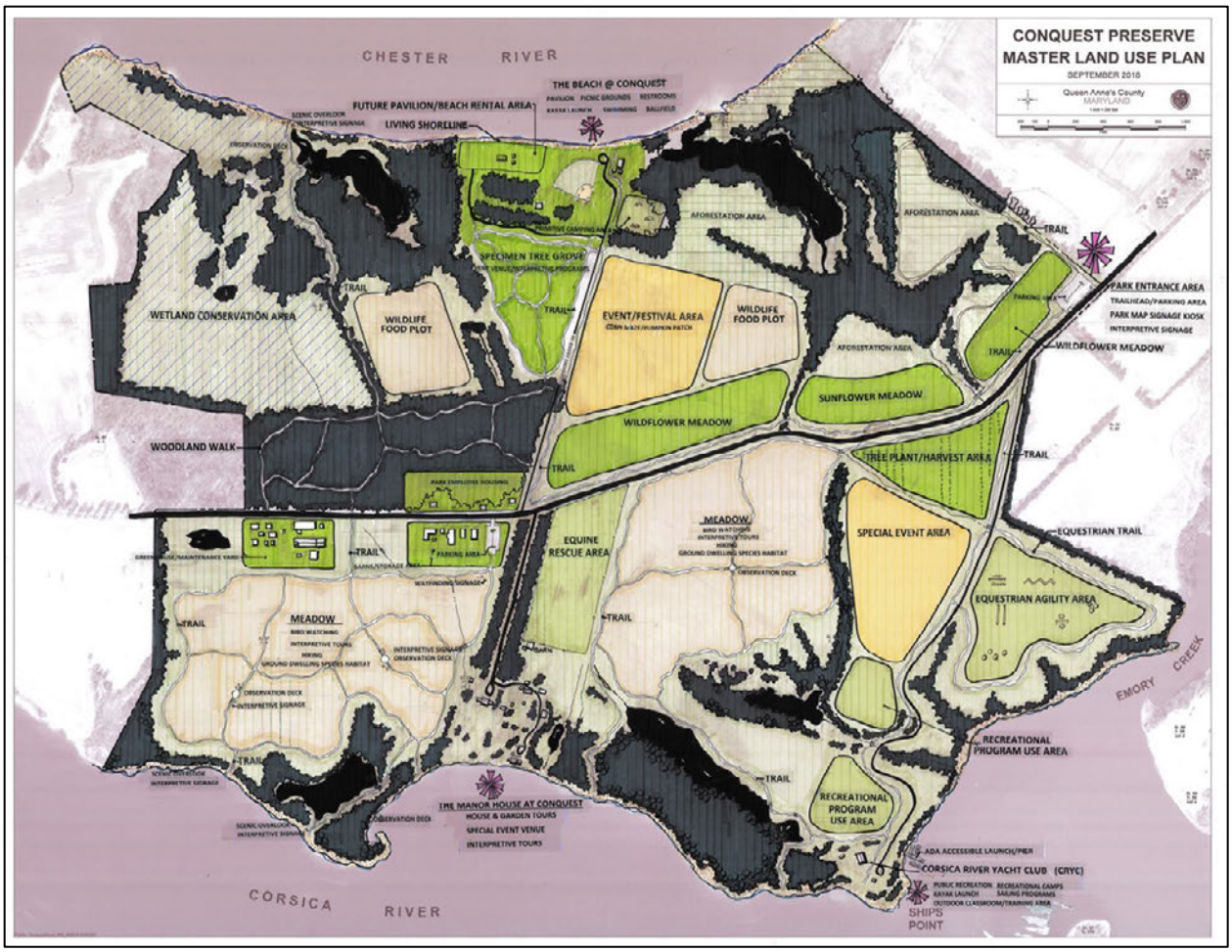


Figure 8.13. Conquest Preserve, Queen Anne's County
https://www.qac.org/facilities/facility/details/Conquest-13

Indiantown Farm, located a half-mile upstream from Conquest Preserve (Figures 8.11 and 8.14), is a privately owned farm of over 330 acres, protected by conservation easements. A very large portion of the farm lies within a predictive model zone indicating an extremely high probability of prehistoric sites, and Maryland Historical Trust archaeological site files record six large sites on the property. One of these is a potential Late Woodland village site that was previously described as the subject of a 2009 archaeological investigation by Washington College (Seidel and Schindler 2012). As explained in earlier sections of this report, we feel that this is the most likely location of Ozinies, or the major Wicomiss village at the time of John Smith's voyages. Although currently accessible only by appointment, the site is significant enough that it warrants inclusion as an ICL anchor point. One of the recommendations of this study will be further investigation of this site as the best possibility for a major Contact period village on the Upper Eastern Shore.

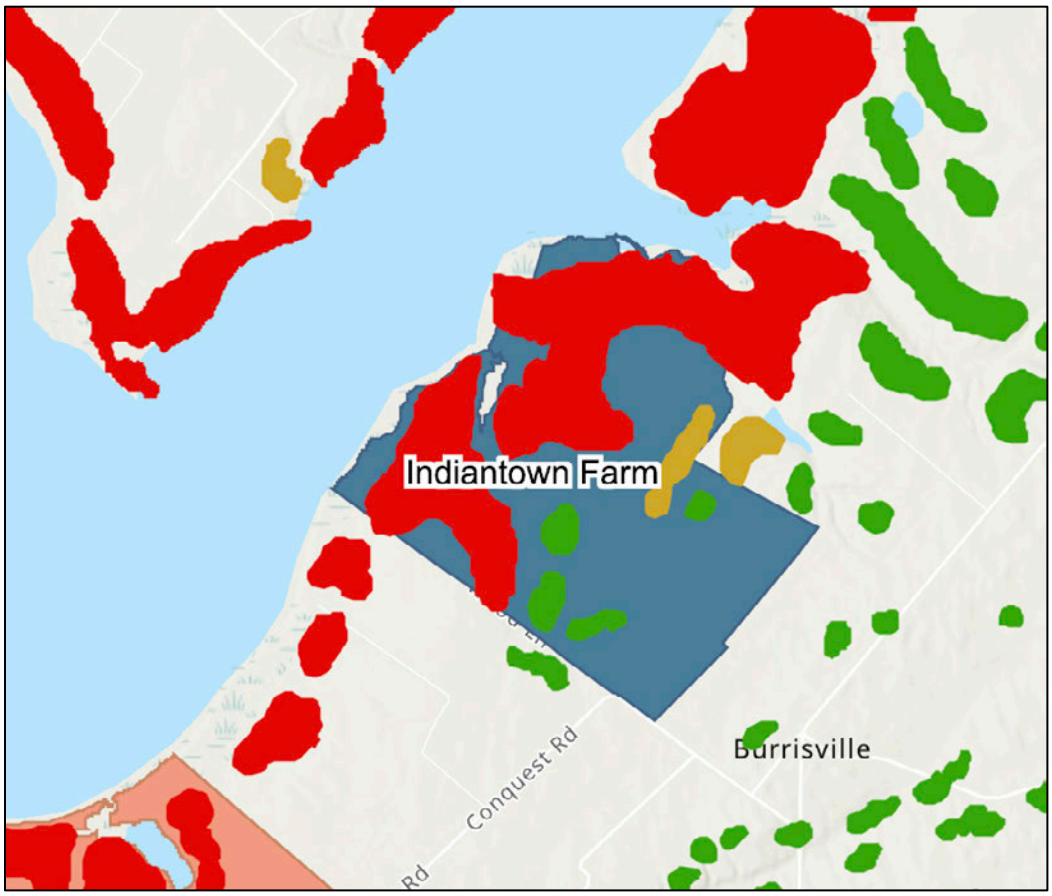


Figure 8.14. Indiantown Farm, with predictive model probability zones (red is extremely high probability, brown denotes high probability, and green represents moderate probability).

The **River & Field Campus** (RAFC) of Washington College, formerly Chino Farm, is located about 2.5 miles above Chestertown, on the Queen Anne's County side of the Chester River (Figure 8.15). RAFC comprises 5,000 acres in three non-contiguous tracts, the largest of which is on the Chester River. In 2001, the farm was placed in conservation easements, making it the largest such easement in Maryland history. The property has 2.5 miles of river frontage, a 90-acre lake, and 1,700 acres of forest. The Foreman's Branch Bird Observatory is one of the busiest bird banding stations in the Middle Atlantic, and the farm has been designated as an Audubon "Important Bird Area." The regional archaeological predictive model rates large portions of the property's three tracts as having significant potential (Figure 8.16), but remarkably, only one very small portion has been surveyed, near the headwaters of Pearl Creek, and only one site has been recorded, a prehistoric lithic scatter.

Significant for this study and securing the property's place as an ICL anchor are several major factors. First, the property offers a long transect of almost four miles from the Chester River south, crossing several zones that would have been utilized by Native peoples in their seasonal rounds. Second, the two eastern tracts have several preserved Delmarva Bays, rare this far west in the county. These were favored locales for Native peoples, given the seasonal

wetlands and ecological diversity they offer. The property does not contain much of the soils that were highly favored by Native peoples for maize cultivation (Figure 8.17), so the interpretive and research value of this property lies with other Native resource extraction strategies.

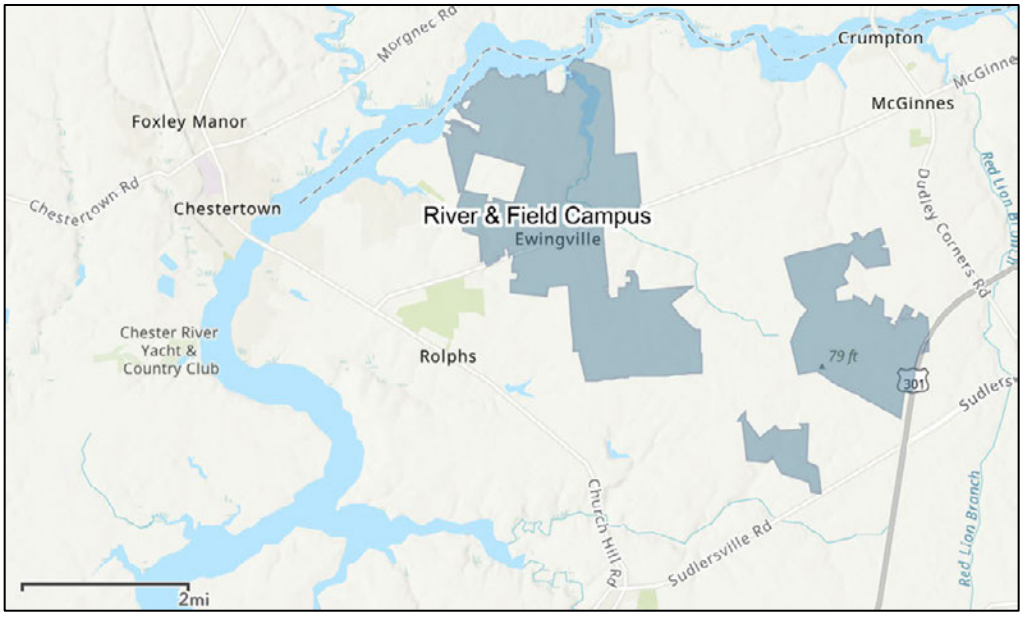


Figure 8.15. The River & Field Campus, Queen Anne's County.

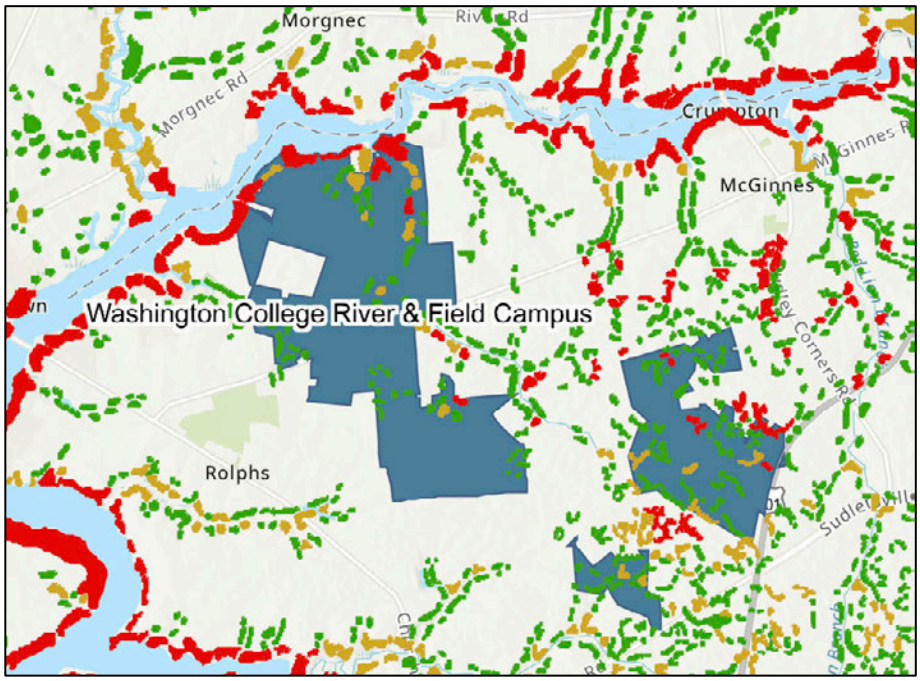


Figure 8.16. Predictive archaeological zones on the River & Field Campus (red is extremely high probability, brown denotes high probability, and green represents moderate probability).

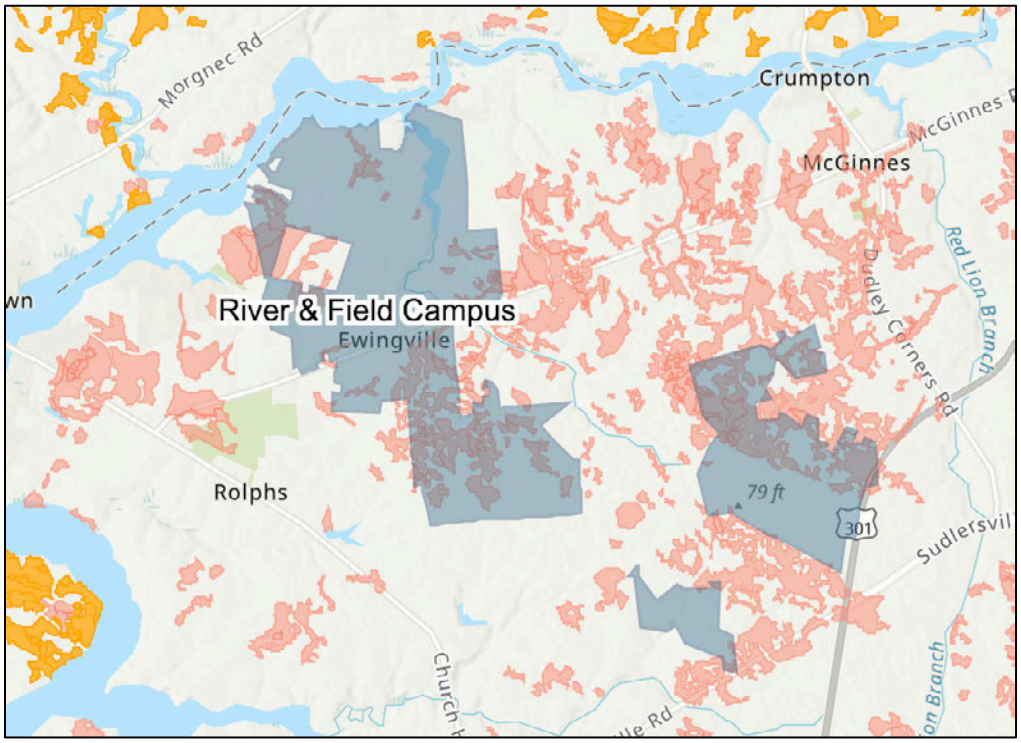


Figure 8.17. Soils at the River & Field Campus – pink denotes sandy loams with 0-2% slope, while yellow (north of the river) denotes Sassafras and Matapeake Soils (loam, sandy loam, and fine sandy loan, with 0-5% slope)

Figure 8.18. Native grasslands (left) and savanna (right) at the River & Field Campus.

RAFC offers a third advantage as an ICL node, providing a unique opportunity to observe Atlantic coastal prairie and associated savanna (Figure 8.18). These two landscapes were highly favored by Native peoples, who worked to create and maintain them using fire. In 1999, an experiment was launched on some of the less productive agricultural land along the Chester

River to re-establish 240 acres of native, warm season grasses. The experiment was a resounding success, prompting the growth of many additional native plants that had seeds still viable in the soil and attracting a wide variety of grassland-obligate birds that were functionally gone from the area (bobwhite quail, grasshopper sparrows, dickcissels). Subsequent work has expanded the grasslands elsewhere on the farm, while working to restore open forest savanna as a habitat for quail. There are multiple stories here, ranging from the importance of conservation to the resilience of habitats when they are given a chance to come back. The interpretive stories also include the use of fire today to control woody species in the grasses, in the same fashion that American Indians used fire as a tool to shape the landscape.

A final benefit to RAFC as an ICL node lies with the ownership and use of the property. It is subject to a gift agreement in which Washington College will assume ownership, in the meantime managing a wide variety of research and educational programming. Education is central to the mission, and archaeology and prehistory will be focal points of a Cultural Resource Management Plan currently being developed. Archaeological field survey will be complemented by experimental archaeology, looking at native habitat management, foraging (there is a dedicated foraging area) and other subsistence strategies, and will join a growing public education program. The Indigenous Cultural Landscape model can be pursued in greater detail on this property over time.

Figure 8.19. Millington Wildlife Management Area.

The **Millington Wildlife Management Area** is a state-owned property located right on the line between Maryland and Delaware, near the headwaters of the Chester River (Figure

8.19). Its 4,000 acres lie primarily in the Chester River watershed, but cross over into the Sassafras watershed. Approximately 75% of the area is forested, with red oak, white oak, pin oak, red maple, sweet gum, Eastern redcedar, and Virginia and loblolly pine. Delmarva Bays are breeding habitats for amphibians, including tiger salamanders and barking treefrogs, while woodcock, waterfowl, deer, cottontail rabbits, mourning doves, squirrels, foxes, and raccoons also inhabit the management area. All of these factored into the subsistence strategies of Native peoples (Figure 8.20), making this anchor property the best place to interpret winter hunting strategies in the ICL.

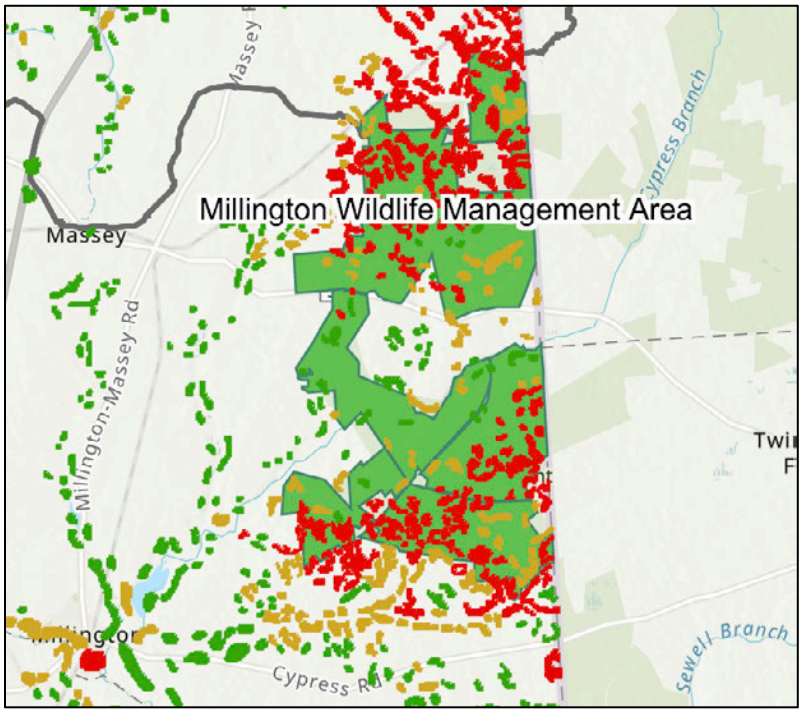


Figure 8.20. Millington WMA with archaeological zones (red is extremely high probability).

Sassafras River ICL Anchors

Moving to the Sassafras River, the **Grove Neck Wildlife Sanctuary**, also known as Grove Neck Managed Hunting Area, is located on the Cecil County side of the river (Figure 8.21). Its 745 acres are comprised of 228 acres of agricultural crops and roughly 392 acres of early successional and deciduous hardwood forest land. Tidal swamps and tidal fresh water marshes encompass about 52 acres, and 24 acres of sandy beach and cliff out-croppings on the river are home to many cliff-obligate species. Grove Neck provides habitat for migratory waterfowl and upland and forest wildlife species, including white-tailed deer, wild turkeys, squirrels, rabbits, and songbirds. The wetlands of this tract also would have offered a variety of plant resources to Native peoples.

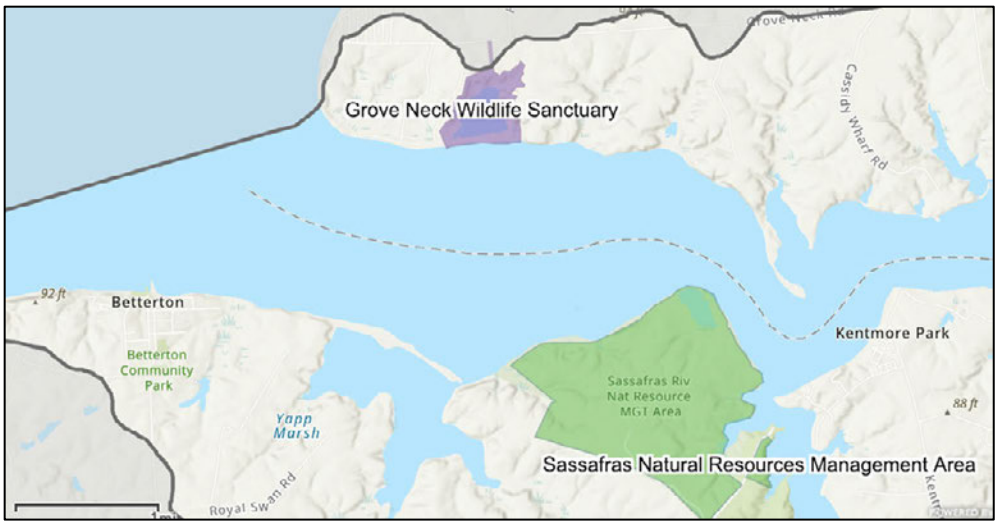


Figure 8.21. Grove Neck Wildlife Sanctuary (Cecil County) and Sassafras Wildlife Management Area (Kent County).

This property is surrounded on all sides by areas predicted to be "extremely" and "highly" likely to contain archaeological sites (Figure 8.22), although the land to the west of the sanctuary has seen some residential development (Figure 8.23). Its main attraction as an ICL anchor lies in its protected combination of woodland and wetland on a steep bluff at the mouth of the river. It also offers a good view of another anchor, the Sassafras Natural Resources Management Area, directly across the river. Grove Neck is owned by the U.S. Army Corps of Engineers and leased to the Maryland Department of Natural Resources for wildlife and hunting management.

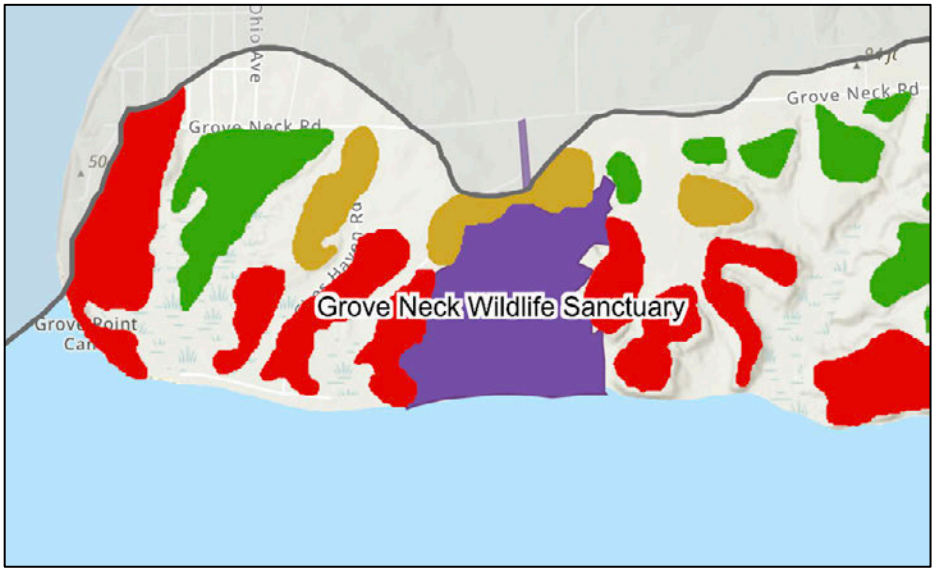


Figure 8.22. Grove Neck Wildlife Sanctuary with predictive model zones (red is extremely high probability, brown denotes high probability, and green represents moderate probability).

Figure 8.22. Grove Neck Wildlife Sanctuary, showing adjacent residential development.

Across the river from Grove Neck in Kent County lies the **Sassafras Natural Resources Management Area** (Figure 8.21). This state management area encompasses 1,200 acres, roughly three miles of shoreline, and nine miles of trails. It is adjacent to the 147-acre **Turner's Creek Park**, owned by Kent County. Both properties are proposed here as an ICL anchor. Until recently, much of the state-owned management area was under agricultural leases, but the Department of Natural Resources has been gradually retiring these leases and allowing the landscape to shift to a more natural state with habitat management. The shoreline offers wonderful views of the river and out to the Chesapeake Bay. Some high bluffs give way in places to accessible beach, and Turner's Creek offers a sheltered landing spot for today's boaters and for Native peoples in the past.

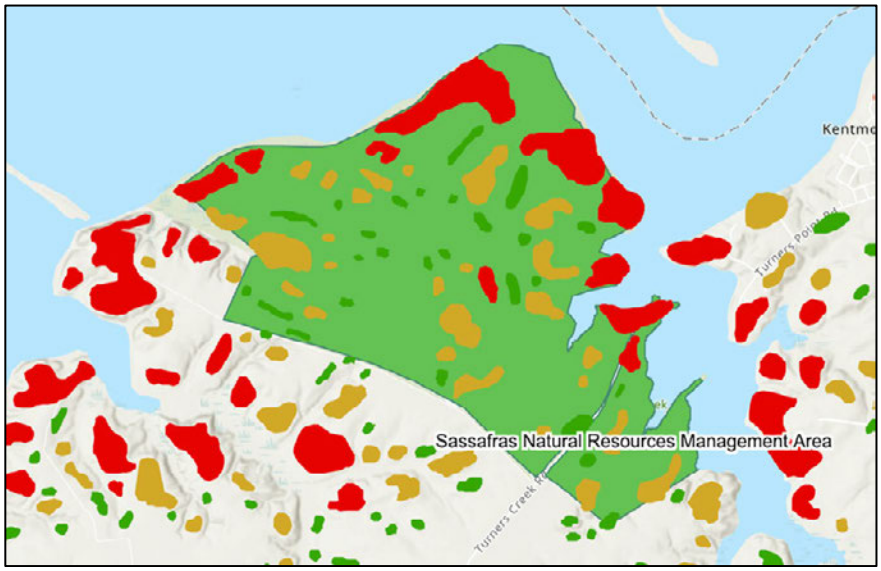


Figure 8.23. Sassafras Natural Resources Management Area and Turner's Creek Park with archaeological predictive zones.

From an archaeological perspective, the tract would have been attractive to Native peoples, as evidenced by the predictive model (Figure 8.23). The area has seen recorded archaeological surveys (Figure 8.24), all but one of which were conducted by Wilke and Thompson in the 1970s. Although as yet unrecorded in the state site files, Washington College walked the fields of the management area extensively, recording archaeological materials without collecting them. Twenty-eight localities were identified, but no evidence of the Contact Period. This led the research team to remove this neck from consideration as the location of Tockwogh, confirming the earlier suspicion that it was not far enough up the river to have offered the Tockwogh the security they would have sought from the Massawomeck. In fact, given the high predictive qualities of the property and the large number of prehistoric sites seen by Washington College, the paucity of Late Woodland remains and absence of Contact Period evidence reinforces the hypothesis that this was dangerous or contested ground during the late prehistoric periods. Whatever attracted people to this particular neck, it was not soils conducive to maize cultivation, as seen in Figure 8.25. Those soils were much more prevalent on the two necks to the east, Shrewsbury and Shallcross Necks.

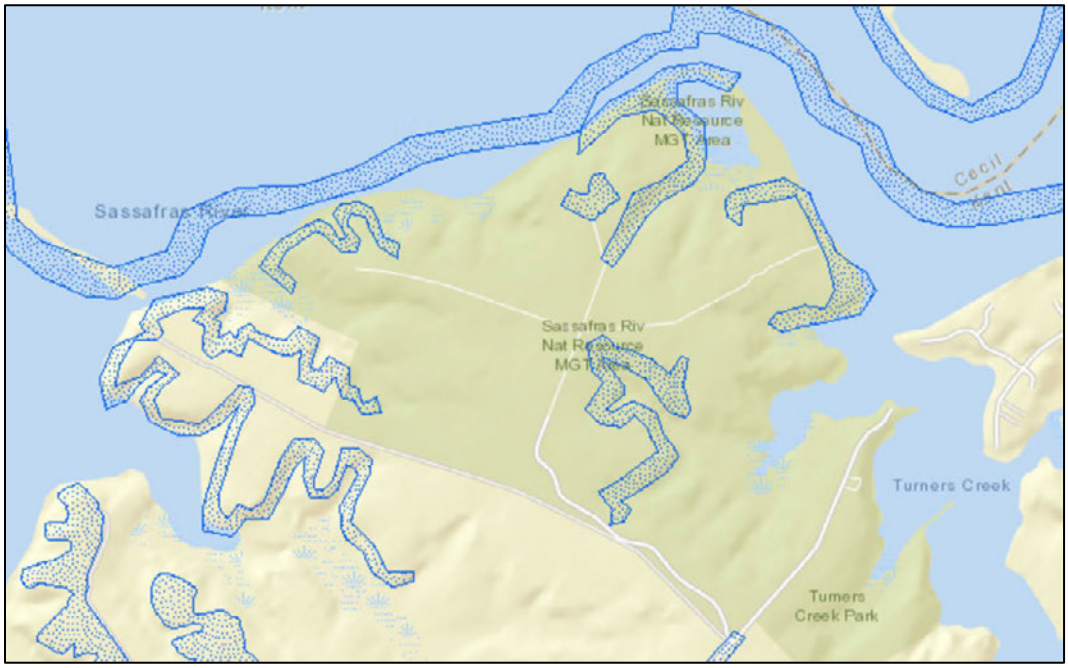


Figure 8.24. Sassafras Natural Resources Management Area with Phase I archaeological survey areas.

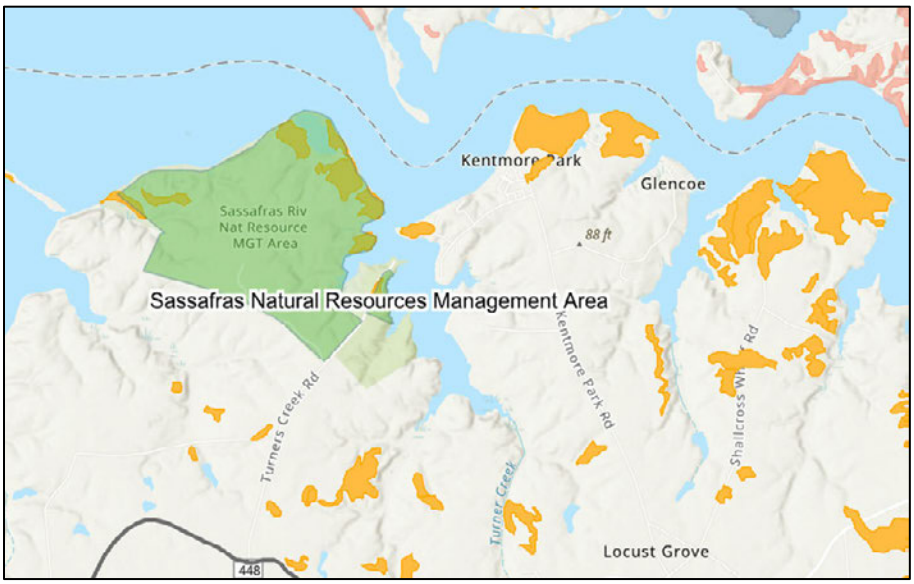


Figure 8.25. Sassafras NRMA & Turner's Creek, showing soils favorable to maize cultivation.

The two properties (Sassafras NRMA and Turner's Creek Park) offer a number of visitor amenities, including an excellent boat ramp, bathroom facilities and Knock's Folly, an 18th C. house that is now an interpretive center.

Mount Harmon Plantation is the last of the anchor points in the Sassafras River watershed (Figure 8.26). Touted as the northernmost of the tidewater tobacco plantations that is open to the public, its genesis was a 350-acre land grant made in 1659. After its settlement in the last half of the 17th century, Mount Harmon began to flourish, with its initial success based on tobacco. The Heath family added to the farm, expanding it to 1,200 acres in 1737. (Seidel 2011).

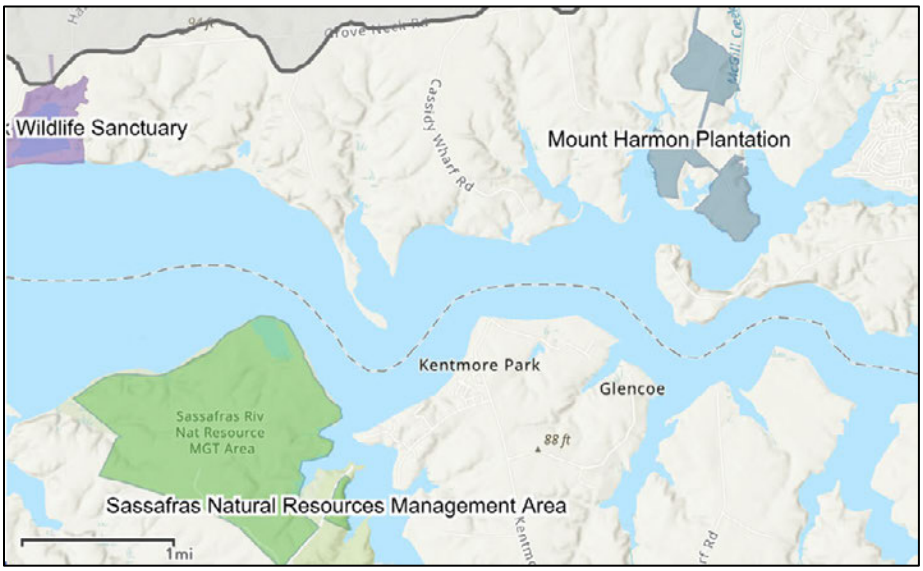


Figure 8.26. Mount Harmon Plantation.

The 200-acre property is managed today by the non-profit Friends of Mount Harmon, and its focal points are a large brick house, built ca. 1788, a tobacco prize house, and trails that wind through the property. Significant portions of the land are protected by easements. Although the visible elements of Mount Harmon focus on a much later time period than this study, the site was a prime location for Native peoples (Figure 8.27). Wilke and Thompson surveyed portions of the shoreline (Figure 8.28), and seven prehistoric sites were recorded: four lithic scatters, one Middle Woodland base camp, and one Early-Late Woodland base camp.

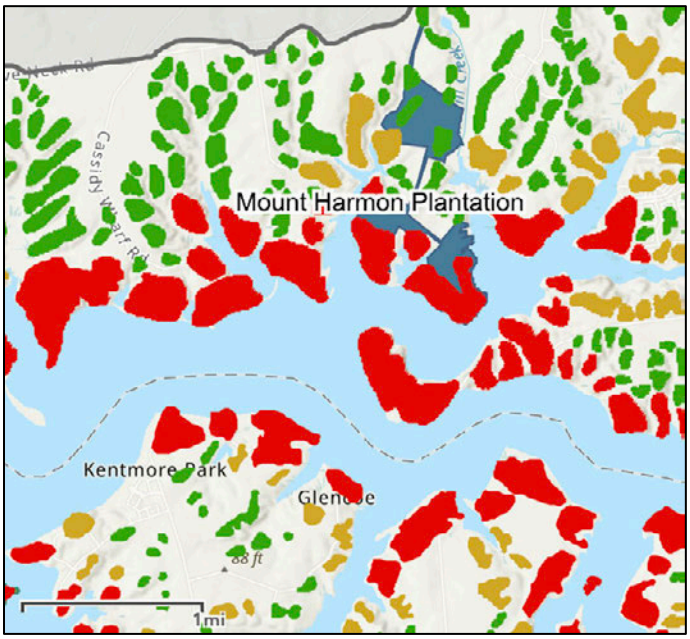


Figure 8.27. Archaeological predictive modeling, Mount Harmon Plantation anchor site.

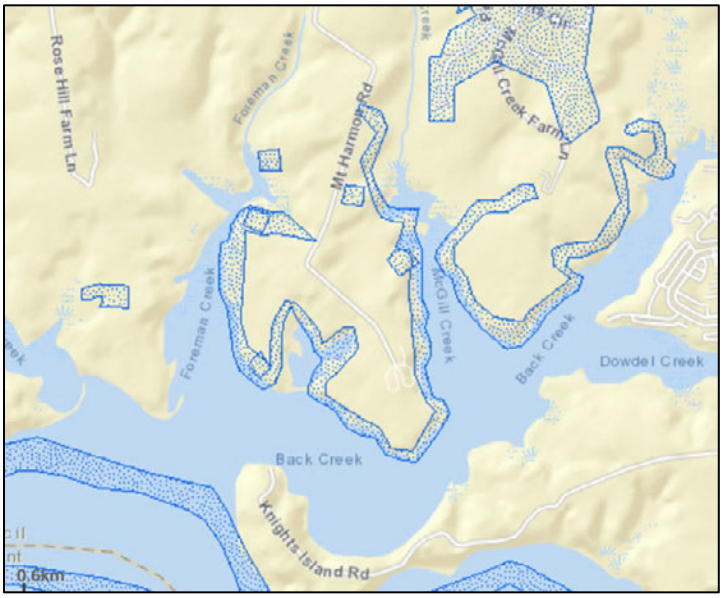


Figure 8.28. Phase I archaeological surveys in the vicinity of Mount Harmon.

The setting of Mount Harmon is a major factor in designating it as an ICL anchor, along with its public accessibility and protected nature. Situated inside Back Creek on the north side of the Sassafras, it is protected by Knight Island (actually a peninsula) on the south. The creek system inside this sheltered area has abundant growth of American lotus (Figure 8.29), and the setting brings home to visitors the beauty and abundance the land held for Native peoples.

Figure 8.29. American lotus in Back Creek, near Mount Harmon.

Extended Project Area – Chesapeake Bay ICL Anchor

In previous sections of this report we noted the interesting complex of sites and features from Worton Point, on the Chesapeake Bay shoreline, north to Still Pond Creek. The shorelines are densely covered with shell middens. Archaeological predictive modeling highlights much of it as very high in probability, and several intriguing sites have been identified. Three of the latter show evidence of Contact Period activity, with Minguannan ceramics perhaps indicating the presence of a refugee Native population. Therefore, we

recommend that the ICL boundary be extended to encompass this area, despite it being outside of the two study watersheds.

Andelot Farm (Figure 8.30) has been identified as an anchor property for the ICL, partly due to its easement protections and current status as a focus for ongoing archaeological investigation by Washington College's Past Is Present Archaeology Lab. The farm's 2,894 acres are bordered by 9.2 miles of Chesapeake Bay shoreline and the shorelines of Worton Creek, Churn Creek, and Still Pond Creek. An adjacent farm adds another 632 acres of protected land, ensuring that the entire tract from Worton Creek to Still Pond Creek is protected.

Figure 8.30. Andelot Farm, western Kent County.

A variety of surveys have been done on the property (Figure 8.31), beginning in the modern period with the work of Wilke and Thompson. Thirty-one archaeological sites of various ages have been delineated, including 21 sites that include shell middens and at least three Late Woodland sites. Many of the Woodland sites combined finds of shell, lithics and ceramics. The biggest site, 18KE25, is the site that was discussed previously as having Minguannan ceramics. This site also has an extraordinary historic site currently being excavated by the Washington College Past Is Present Archaeology Lab, dating between 1680-1720 and yielding quite a few Native American materials. Directly across Churn Creek from Andelot Farm is Kinnaird Point, the location for the other two sites with Minguannan components, 18KE29 and 18KE71. Kinnaird Point holds another 36 sites, pointing to the attractiveness of this larger area to Native peoples.

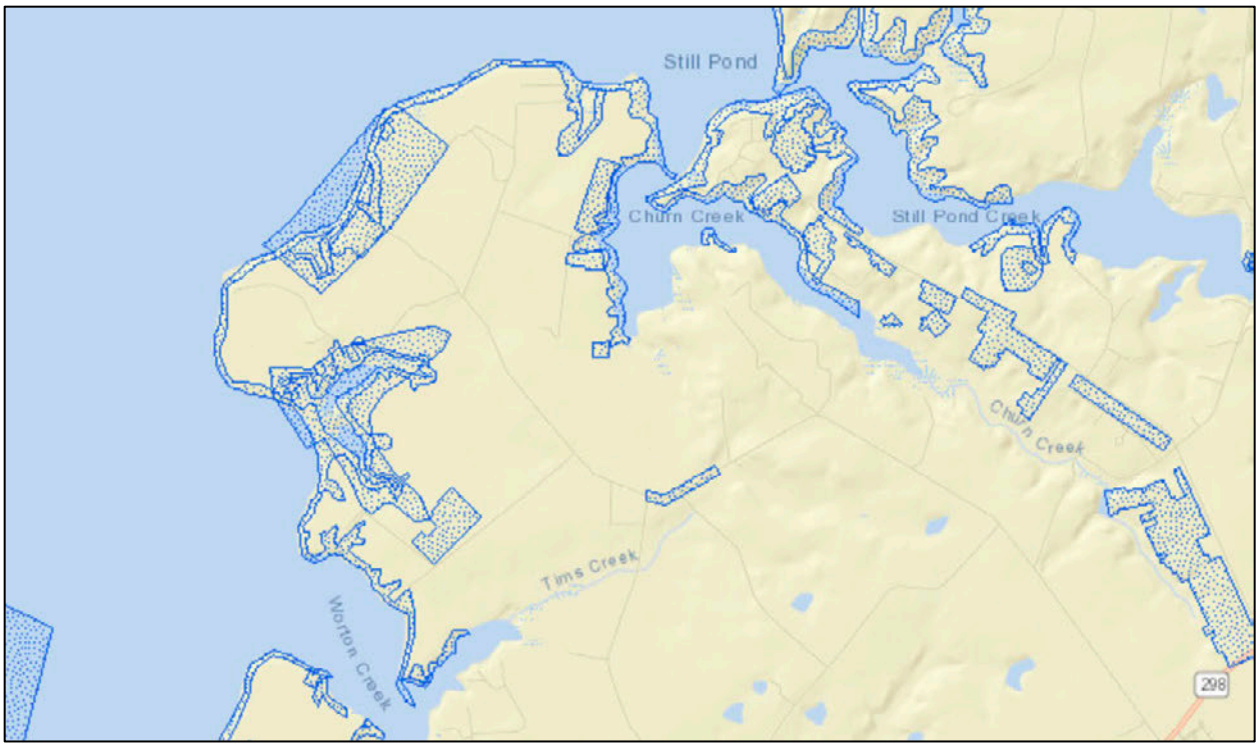


Figure 8.31. Phase I archaeological surveys in the vicinity of Andelot Farm.

Although Andelot Farm is not open to the public, except when archaeological excavations are held, its abundant resources and protected status make it a logical anchor for this portion of the extended ICL. Even if it is not publicly accessible, it offers a vehicle for explaining the important nature of this area and how the Bay-side resources complemented those of the rivers and inland areas. These were critical components of Indigenous lifeways.

Interpretive Nodes

Public use, accessibility, interpretation, and education are central to the mission of the National Park Service, so we also have considered the advisability of defining interpretive nodes or vantage points for this ICL. These are defined as publicly accessible locales that offer exceptional opportunities for interpretation of this indigenous landscape. Seven nodes are highlighted here. Six are the publicly accessible anchor properties discussed above: Eastern Neck National Wildlife Refuge, Conquest Preserve, the River and Field campus, and Millington Wildlife Management Area on the Chester, and the Sassafras Natural Resources Management Area and Mount Harmon Plantation on the Sassafras River. The seventh is the town of Chestertown, which offers multiple venues for ICL interpretation. The Sultana Education Foundation is already a partner with the National Park Service in managing the Chester River portion of the Captain John Smith Chesapeake National Historic Trail. Another valuable venue is Washington College's Past Is Present Archaeology Lab, which belongs to a 12-member coalition of museums in Kent County and currently is upgrading its exhibitions and interpretive materials with funding from the Maryland Heritage Areas Authority. It not only offers interpretive

opportunities, but has been active in archaeological and historical research focused on the ICL, having developed the regional archaeology predictive model and surveyed and excavated sites in the ICL. The lab also developed the feasibility study that resulted in the Chester River's inclusion in the Captain John Smith Chesapeake National Historic Trail and prepared this study on ICL definition.

Drawing the ICL Boundary

Deciding how to draw the boundary for the Chester-Sassafras Indigenous Cultural Landscape – what to include and what to exclude – is difficult. We therefore choose to err on the side of inclusion, while explaining the rationale for the delineation. The starting point is the list of ICL criteria reviewed earlier. Our assessment of these criteria is informed by predictive modeling , the results of archaeological survey, analysis of historical texts, and analogy to comparable areas. Considerations of land protection, public accessibility, and interpretive potential, including suitable ICL anchor properties, also factor into the decision. The recommended boundary is shown in Figure 8.32.

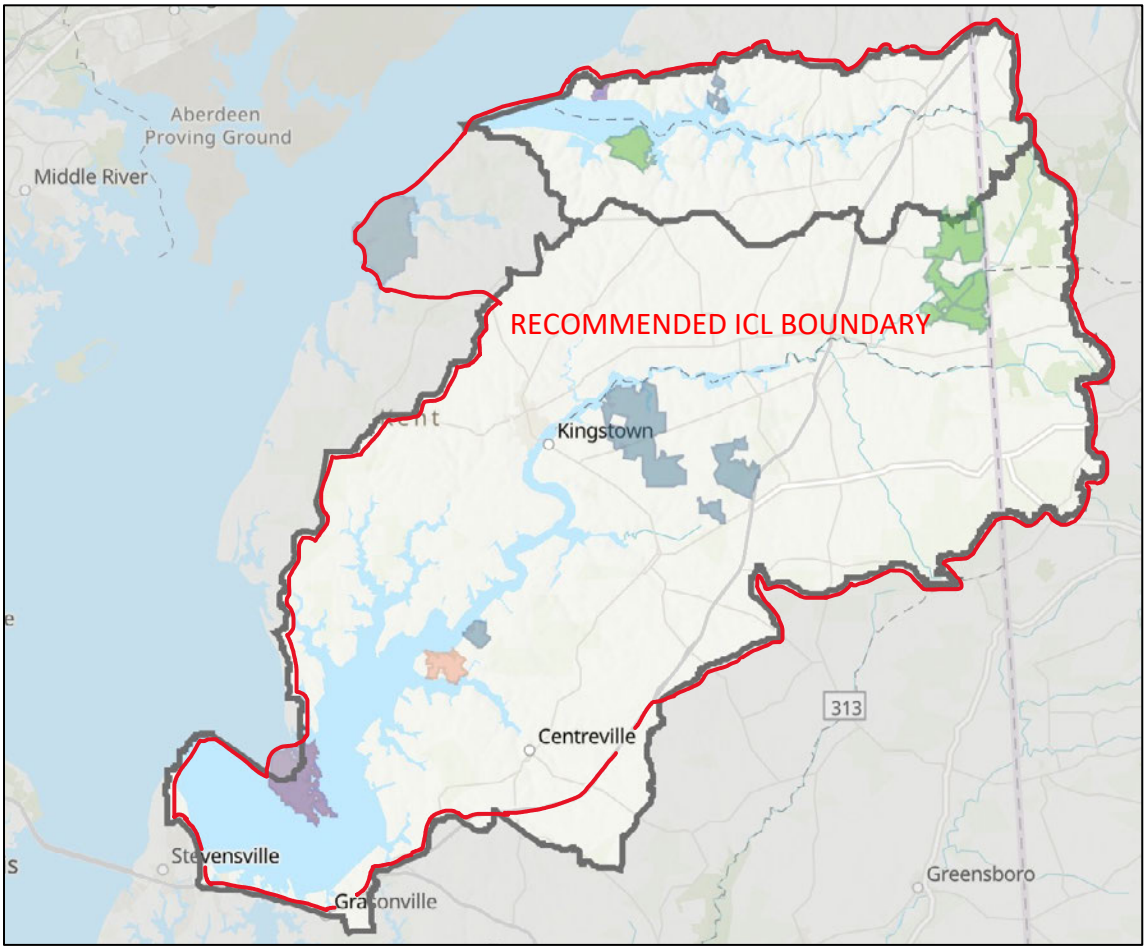


Figure 8.32. Recommended ICL boundary, with anchor properties highlighted.

Starting in the northeasternmost extent of the two watersheds, in Delaware, the recommended boundary follows the upstream limits of the two watersheds, running south to roughly parallel the boundary between Maryland and Delaware. We recommend the inclusion of this entire area, as the headwaters were important hunting grounds and also the entry and exit points to these territories for overland travel and trade to the east. The anchor in this area is the Millington Wildlife Management Area.

The boundary follows this eastern limit of the watersheds to where it crosses the Delaware-Maryland boundary and continues to follow the watershed limit until that line approaches Rt. 301 just north of Carville. At the intersection of Hayden Road and Rt. 301 (where the Bay Country Welcome Center is located), the ICL boundary jumps west to coincide with Rt. 301. This eliminates from the ICL a small area on the east side of Rt. 301, around the head of Mill Stream Branch, but it is easier to follow. The ICL boundary rejoins the southern Chester River watershed boundary where it intersects John Brown Road, and then follows the watershed limit to the junction of Rts. 50 and 301. Here it follows Rt 50-301, cutting out a developed portion of Grasonville, all the way to the western limit of the watershed, where Rt. 50-301 intersects with Castle Marina Road. The watershed line follows Castle Marina Road north to Grollman Road and Love Point Road, running north to Love Point.

The western boundary of the recommended ICL crosses the mouth of the Chester River and then encompasses the entirety of Eastern Neck National Wildlife Reserve, another ICL anchor property. The boundary runs north along the watershed line, through Rock Hall, and then up to Worton and the intersection of Worton Road (Rt. 297) with the watershed line, and then runs west to the southernmost extent of Andelot Farm. From there, it follows the shoreline of Worton Creek, then the shoreline of the Chesapeake Bay all the way up to the mouth of the Sassafras River. From there it follows the watershed line back to the beginning.

CHAPTER 9
CONCLUSIONS & RECOMMENDATIONS

Summary & Conclusions

Delineating and understanding the potential of an indigenous cultural landscape for the Chester and Sassafras Rivers has been rewarding, but a number of factors made it an interesting challenge. The three recorded indigenous groups present at Contact were the Tockwogh, the Wicomiss (Ozinies), and the Matapeake (Monoposnon). Those populations were pushed out of the study area earlier than was the case in other ICLs. This in turn means that the historical record is sparse, with no references to the Tockwogh after 1608 and limited information on the Ozinies or Wicomiss. Tragically, we know the name of only one individual of the Wicomiss, Anatchcom. The Matapeake seem to have been gone from Kent Island by the 1660s. A small Native population was still on the island as late as the 1760s, but we do not know if they were descended from or related to the Matapeake. The early departure of Native peoples and their subsequent history means that there is no successor tribal entity in the area, no reservation lands, and no clear descendant population. The two watersheds have not seen as much archaeological investigation as some of the other ICLs. As a result, there remain important things that we simply do not yet know; for example, we are even uncertain about something as basic as how important maize production was for this area.

Despite these constraints, it is clear that there is an extensive and important indigenous legacy embedded within an exceptionally well-preserved landscape. By using historical sources, archaeological evidence, and the judicious use of comparison and analogy to other Algonquian groups in the Chesapeake, we have a good understanding of lifeways. Although it appears that Late Woodland and Contact Period populations are lower in the study area than in regions farther south, it is clear that there were at least two villages in the study area (Tockwogh and Ozinies/Wicomiss). The question of how important maize was aside, any horticulture was supplemented by a vast array of abundant resources spread across the region. In seasonal rounds that saw them moving around the landscape, Native peoples fished in the spring, harvested the plentiful shellfish of the Chesapeake Bay, and foraged from a diverse assortment of plant foods. In the fall, the region's forests offered a variety of nuts, and fall and winter hunting provided an important element of the subsistence base. These seasonal rounds entailed periods of fission and fusion of the population, as they gathered at certain times and dispersed at others. Gatherings saw celebrations and feasts of thanksgiving. They developed deep ties to the land, a sense of place in which places had meaning. Human connections to the land were both practical and spiritual.

Beyond the movement of people within the ICL for subsistence practices, there were broader movements of peoples, at various levels. The Native peoples of this area regularly communicated with their neighbors and traded over short and longer distances. Some of this

was done by water, which took advantage of the many tributaries of the Chesapeake Bay. But there also were well-established paths or trails through the interior, linking the Chesapeake to the Delaware via east-west routes and connecting them to points north and south.

In addition to individuals and groups of traders crossing tribal boundaries, there were much larger movements of peoples. The Algonquians themselves were distributed across the landscape from present-day New Jersey down through Delaware, Maryland, Virginia, and the Carolinas, after a long migration from the north. By the time John Smith and other Europeans came on the scene, they were well established and had fine-tuned their adaption to the regions in which they lived. But by that time, there were other groups on the move.

From the west, Siouxan groups were testing the boundaries of the Powhatan and others in the south. The Iroquoian Massawomecks had moved into western Maryland and were raiding into the Upper Chesapeake Bay. Their impact may have been severe enough to turn the northwest portion of the Chesapeake Bay into a no-man's land. Moving south into the Bay, from settlements up the Susquehanna River, was another Iroquoian group, the Susquehannock. By the time John Smith met and described them, they had brought the Tockwogh under their control, while contesting with the Massawomecks. Once it was clear that they could trade for European goods in the Chesapeake, the Susquehannock appear to have pushed out the Tockwogh. Although there are hints that the Tockwogh moved south and perhaps joined the Nanticoke, they effectively vanished shortly after Smith met them in 1608. The Susquehannock also pushed east, vying with the Lenape for access to the Dutch and Swedes.

At the same time, the Wicomiss pushed back against both the Susquehannock and the English, in a pattern of shifting alliances that ultimately failed. They gradually were displaced south, eventually finding themselves in Nanticoke territory and then fragmenting. Some may have joined the Nanticoke, others may have kept moving, and some were sold into slavery in Barbados.

The Susquehannock nominally controlled the study area by 1648, but they do not appear to have had much of a physical presence. In western Kent County, there are indications of some late movements of new people into the area, with Minguannan ceramics suggesting a Lenape presence, perhaps in response to the disruptions in the east from the Dutch, the Swedes, and the Susquehannock. Although the timing is uncertain, it seems likely that this occurred between the 1630s to about 1650. In the 1690s there was an influx of what initially were thought to be "northern Indians" into Cecil County, at Bohemia Manor, although they actually were Shawnee forced out of their homes to the southwest. They appear to have settled in for several years, and they may well have occasionally ranged into our study area. All of these episodes speak to the hugely unsettled nature of the region in the 17th C., and the Native presence did not end with the close of the century. Based on practice elsewhere, we can reasonably surmise that descendants may have journeyed back to the region on occasion to revisit sacred places and their ancestors, and there were Native peoples on Kent Island into the 1760s.

Although neither of the two major villages thought to have existed in the ICL at Contact have been definitively located, Tockwogh was certainly on the southern shore of the Sassafras River and likely can be found. Smith suggested a population of just over 300 people, and they would have been somewhat dispersed, leaving a less pronounced footprint than some of the more populous polities to the south. Ozinies seems synonymous with Wicomiss, and it is likely that Smith seriously underestimated their population or was misinformed. Everything we know about Algonquian practice combines with the few accounts we have of the Wicomiss being some distance upriver from Kent Island to suggest the Indiantown Farm area as the most likely place for their principal village.

Recommendations

Our recommendation for the boundary delineating the Chester and Sassafras River Watershed ICL was presented in Chapter 8 and shown in Figure 8.32. With minor deviations, it mirrors the watershed boundaries. The most important exception is the inclusion of an area lying on the Chesapeake Bay, to reflect the estuary's critical importance to the Native peoples of the region and because of its evidence of a possible refugee population late in the story of Native dispossession.

Nine protected "anchor properties" have been recommended as exemplars of habitats, resources, and site types important to Native peoples. These are:

- Eastern Neck National Wildlife Reserve (Chester River, federally owned)
- Conquest Preserve (Chester River, county owned)
- Indiantown Farm (Chester River, privately owned, with easements)
- River & Field Campus, Washington College (Chester River, privately owned, with easements)
- Millington Wildlife Management Area (Chester & Sassafras Rivers, state owned)
- Mount Harmon Plantation (Sassafras River, privately owned, with easements)
- Sassafras Natural Resources Management Area (Sassafras River, state owned)
- Grove Neck Wildlife Sanctuary (Sassafras River, federally owned)
- Andelot Farm (Chesapeake Bay, privately owned, with easements)

In addition, eight interpretive nodes are recommended, based on public accessibility and the potential for interpretation and education. All but one of these interpretive nodes also serve as anchor properties:

- Eastern Neck National Wildlife Reserve (Chester River, federally owned)
- Conquest Preserve (Chester River, county owned)
- River & Field Campus, Washington College (Chester River, privately owned, with easements)
- Millington Wildlife Management Area (Chester & Sassafras Rivers, state owned)
- Mount Harmon Plantation (Sassafras River, privately owned, with easements)

- Sassafras Natural Resources Management Area (Sassafras River, state owned)
- The Town of Chestertown, including possible interpretive centers at the Sultana Education Foundation and Washington College's Past Is Present Archaeology Lab

Several recommendations are offered for additional research. This study clearly shows both the potential and the need for additional archaeological surveys in the area, especially north of the Chester River. A variety of research questions require larger sample sizes, if we are to truly understand what happened here. As but one example, additional survey will allow a better assessment of population sizes in the Late Woodland and Contact Periods. The evidence to date suggests that populations were lower as one moves north on the Eastern Shore, but this may be an artifact of sampling.

A concerted effort should be made to find period villages. Evidence suggests that Indiantown Farm is the location of a major Wicomiss village, but insufficient investigation has been done to know this with absolute certainty. Less certain is the location of Tockwogh, but Shrewsbury Neck seems the most likely candidate, followed by Shallcross Neck. The palisaded village described by Smith should have left a distinctive footprint. Finding either or both of these villages would fill in the many gaps in our knowledge about the indigenous population. In any future excavations, archaeobotanical sampling is essential, as it will shed light on subsistence details, including the extent to which maize horticulture was practiced. That, in turn, has important implications for larger subsistence patterns and social organization.

Another promising focus for future research lies with understanding more recent Native peoples in the area. Discussions with Chief Coker of the Lenape Tribe of Delaware revealed at least one family that in recent memory moved from Chestertown, in the ICL, to neighboring Cheswold, Delaware. Are there others? What is their history in the ICL?

As the original populations moved away from this area, some elements probably were absorbed into neighboring tribes. This facet of the past has been unexplored and is not yet a prominent concern among their descendant populations. Nevertheless, it could be useful to further explore this with the Lenape and the Nanticoke, which emphasizes the need for continued consultation and dialog with the tribes. Despite the apparent distance between modern groups and the project area, both geographic and genealogical distance, the development and interpretation of the ICL, as well as its management, can only benefit from this relationship. Furthermore, interpretive goals should meet their modern needs, and two such examples emerged during this study.

First, there is the tribal concern over the treatment of burial grounds, such as the presumably submerged Archaic burials off Nichols Point in the Chester River. A concerted effort should be made to track down and repatriate any remains that may be in private hands. In addition, outreach is warranted to watermen and to government agencies that control activities such as dredging. Looking to the future, a zone where such disturbances are prohibited may be advisable. Representatives of the Nanticoke Indian Association made it clear that protecting these ancestors and relatives is a priority for them.

A second area of concern, again emphasized by the Nanticoke Indian Association, lies with educating the next generation, seeking approaches that are most likely to engage and stir interest. A focus on visual materials and tangible objects seems to offer promise here and should be a priority. But this goal should not obscure the need to develop educational resources for all ages and interest groups.

With regard to interpretive themes, this study has offered many elements that lend themselves to interpretation. Some of these are surprising to many people, such as the extent of trade networks and inter-group contact (indigenous and European), the dynamic nature of population movement and geopolitics in the larger region, the ways in which Native peoples resisted encroachment and dispossession, and the complex details of subsistence and its myriad facets. Another underappreciated story is the multiple ways in which Native peoples thought about and connected to the land, from the pragmatic to the spiritual, and the deep meaning of place. This, too, emerged in all of our conversations with tribal representatives. In a modern population such as ours, that is so mobile and has so lost its connections to place, this is a particularly valuable topic for discussion, one that might help inculcate a broader sense of stewardship for cultural and natural resources. Also, a valuable resource would be a document (or documents) that systematically list and describe specific areas along each river that are evocative and would allow visitors to mentally slip back in time. This has been done for the Chester River (Seidel 2009) and should be done for the Sassafras River.

All of these interpretive efforts should move beyond the story of John Smith and avoid the all too frequent, narrow temporal focus that starts in 1607 and ends in the mid-17th C. The story here is much deeper, and interpretation must understand the landscape of the Chester and Sassafras Rivers in terms of a long and evolving social use of space and place, with long term associations, memories, and meaning.

We feel that the anchor properties and interpretive nodes recommended here offer potentially powerful venues for telling the story. To the extent that a unified and coherent approach can be developed for the ICL as a whole, this will encourage heritage and eco-tourism with the potential to benefit the local economy. An effective strategy would be to tell different parts of the story at the most appropriate sites or nodes, but within an overarching, cohesive framework. This would encourage people to move around the ICL in much the same way that the original peoples did, fostering a deeper appreciation for that way of life. This has the added benefit of encouraging visitors to stay longer in the area, bringing an obvious enhancement of economic benefits.

Although government at all levels in the region, as well as private landowners, has done an excellent job in preserving the landscape, there is always more that can be done. Future efforts might focus on gap analyses and viewshed analyses to determine what key properties might still need protection or can best add to the story and the visitor experience.

These recommendations are summarized in Table 9.1.

Table 9.1 Recommendations for the Chester & Sassafras River Watersheds ICL.

ITEM	ACTIONS
ICL Boundaries	As defined in the Project GIS and Figure 8.32 of this study
Recognize Nine Anchor Properties	Eastern Neck National Wildlife Reserve (Chester River, federally owned)
	Conquest Preserve (Chester River, county owned)
	Indiantown Farm (Chester River, privately owned, with easements)
	River & Field Campus, Washington College (Chester River, privately owned, with easements)
	Millington Wildlife Management Area (Chester & Sassafras Rivers, state owned)
	Mount Harmon Plantation (Sassafras River, privately owned, with easements)
	Sassafras Natural Resources Management Area (Sassafras River, state owned) & Turner's Creek (Sassafras River, Kent County owned)
	Grove Neck Wildlife Sanctuary (Sassafras River, federally owned)
	Andelot Farm (Chesapeake Bay, privately owned, with easements
Recognize Eight Interpretive Nodes	Eastern Neck National Wildlife Reserve (Chester River, federally owned)
	Conquest Preserve (Chester River, county owned)
	River & Field Campus, Washington College (Chester River, privately owned, with easements)
	Millington Wildlife Management Area (Chester & Sassafras Rivers, state owned)
	Mount Harmon Plantation (Sassafras River, privately owned, with easements)
	Sassafras Natural Resources Management Area (Sassafras River, state owned) & Turner's Creek (Sassafras River, Kent County owned)
	The Town of Chestertown, including possible interpretive centers at the Sultana Education Foundation and Washington College's Past Is Present Archaeology Lab
	Develop coordinated interpretive approaches for each interpretive node and the ICL as a whole (see below)
Expand Regional Archaeological Survey	Larger area coverage and sample sizes are needed to assess basic questions such as Late Woodland and Contact Period population size, subsistence, and the variety of site types.
Archaeological Search for Village Sites	Concerted effort to find the historically reported villages of Tockwogh Sassafras River, south shore) and Ozinies (Chester River, south shore, especially Indiantown Farm). Excavations should include sampling and analysis focused on subsistence.
Descendant Population Research	Research into possible movements of people and absorption into larger groups such as the Nanticoke and Lenape.

Protections for Burial Grounds	This includes burials from all periods, including the presumably earlier finds from Nichols Point.
	Discussions with watermen and regional collectors.
	Explore restrictions on bottom disturbance off Nichols Point.
Repatriation	Repatriation of any human remains or burial objects.
Expanded Interpretation and Education	Education focused on the next generation of indigenous peoples, including visual materials and tangible objects to engage interest.
	Explore interpretive potential with regional Indigenous peoples, including the Lenape and Nanticoke.
	Interpretive design and marketing designed for regional economic growth via tourism.
	Explore the most powerful themes, including indigenous land-use, stewardship, and sense of place; subsistence and lifeways; trade and intergroup relationships; population movement; geopolitics; Native resistance.
	Design cohesive interpretation efforts utilizing anchor properties and interpretive nodes, with parts of the story being told at different places as appropriate, but within an over-arching framework.
	List “evocative places” for each river as a tool for interpretive efforts and use by visitors.
Gap & Opportunity Analyses	Conduct gap analyses to assess gaps in protection or conservation.
	Study intervisibility and view sheds from key areas such as anchor properties and interpretive nodes; use this as a tool for prioritizing additional protections.
	In addition to exploring gaps, think about new opportunities for research beyond these recommendations and to expand interpretive themes and methods.
	Modify, expand, or otherwise adapt other elements of these recommendations as necessary to account for identified gaps and opportunities.

In this study, we have tried to bring the indigenous history to the fore, emphasizing how Native peoples thought and acted, and how the evidence of their lives endures in this landscape. That indigenous focus is essential, but it should not obscure the fact that this is our collective heritage, one from which we can all learn and benefit. Establishing this formal Indigenous Cultural Landscape of the Chester and Sassafras River watersheds not only commemorates a prolific environment and a vibrant indigenous way of life; it also reminds us of those who have gone before, of the deeper meanings embedded in the landscape, and of our collective role as stewards of this rich heritage.

REFERENCES CITED

Alsop, George

1666 *A Character of the Province of Maryland.* Newton D. Mereness, ed. Burrows Brothers Company, Cleveland. Reprinted in 1902.

Barbour , Philip (ed.)

1986 *The Complete Works of Captain John Smith (1580-1631).* 3 volumes. The University of North Carolina Press, Chapel Hill.

Bedell, John, Jason Shellenhamer, Charles LeeDecker, and Stuart Fiedel

2011 River and Mountain, War and Peace: Archeological Identification and Evaluation Study of Chesapeake & Ohio Canal National Historical Park, Hancock to Cumberland (Mile Markers 123 to 184). Report to the National Park Service, National Capital Region. The Louis Berger Group. Washington D.C.

Birnbaum, Charles A.

1994 *Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes.* Preservation Brief 36. National Park Service. Washington, DC.

Bourne, Michael

1998 *Historic Houses of Kent County: An Architectural History1642-1860*. Eugene Johnston, ed. Historical Society of Kent County, Chestertown, Maryland.

Bozman, John Leeds

1837 *History of Maryland.* Vol. I: 144-145). James Lucas and EE. K. Deaver. Baltimore.

Brooks, William K.

1891 *The Oyster* (Baltimore: The Johns Hopkins University Press; reprinted in 1996 by The Johns Hopkins University Press, Baltimore, Maryland.

Browne, William H., et al.

1883 *Archives of Maryland Vol. 5*. Baltimore and Annapolis: Maryland Historical Society and Maryland State Archives.

1890 *Archives of Maryland, Vol. 8, Proceedings of the Council of Maryland, 1687/8-1693*. Baltimore: Maryland Historical Society.

1896 *Archives of Maryland, Vol. 15, Proceedings of the Council of Maryland, 1671-1681*. Baltimore: Maryland Historical Society.

1899 *Archives of Maryland, Vol.19, Proceedings and Acts of the General Assembly of Maryland, September 1693-June 1697*. Baltimore: Maryland Historical Society.

1902 *Archives of Maryland, Vol. 22, Proceedings and Acts of the General Assembly of Maryland, March 1697-July, 1699*. Baltimore: Maryland Historical Society.

1905 *Archives of Maryland, Vol. 25, Proceedings and Acts of the General Assembly of Maryland, 1698-1731*. Baltimore: Maryland Historical Society.

1906 *Archives of Maryland, Vol. 26, Proceedings and Acts of the General Assembly of Maryland, September 1704-April, 1706.* Baltimore: Maryland Historical Society.

1907 *Archives of Maryland, Vol. 27, Proceedings and Acts of the General Assembly of Maryland, March 26, 1707 - November 4, 1710.* Baltimore: Maryland Historical Society.

Budwah, Rick, and Tyler McCreary

2013 Reconciling Cultural Resource Management with Indigenous Geographies: The Importance of Connecting Research with People and Place. In *A Deeper Sense of Place: Stories and Journeys of Indigenous-Academic Collaboration*. Jay T. Johnson and Soren C. Larsen, editors. Pages 195-213.Oregon State University Press, Corvallis.

Cadzaw, Donald A.

1936 *Archaeological Studies of the Susquehannock Indians of Pennsylvania*. +Safe Harbor Report No. 2. Pennsylvania Historical Commission. Harrisburg, PA:

Clark, Wayne

2019 *Algonquian Cultures of the Delaware and Susquehanna River Drainages: A Migration Model.* WMCAR Project No. 09–26 NRAP Project No. DEWA 2010 A. William and Mary Center for Archaeological Research. Williamsburg, Virginia.

Coker, Dennis

2022 Personal communication with Chief Dennis Coker, Lenape Indian Tribe of Delaware. May 24, 2022.

Curry, Dennis

1986 Prehistoric Kent County. In *Historic Houses of Kent County: An Architectural History1642-1860*. Eugene Johnston, ed. Historical Society of Kent County, Chestertown, Maryland.

2002 The Old Copper Culture in Maryland? *Maryland Archaeology*, Vol. 38, No. 2:33-34.

Custer, Jay F.

1989 *Prehistoric Cultures of the Delmarva Peninsula: An Archaeological Study.* University of Delaware Press, Newark.

1990 The Woodland I - Woodland II Transition in the Delmarva Peninsula and Southeast Pennsylvania. *North American Archaeologist*, Vol. 11, No. 3.

Custer, Jay F., and Keith Doms

1983 *A Re-Analysis of Prehistoric Artifacts from the Wilke-Thompson Collection, Kent County, Maryland*. Center for Archaeological Research, Department of Anthropology, University of Delaware. Newark.

Custer, Jay F. and Scott Watson

1985 Archaeological Investigations at 7NC-E-42, a contact –period site New Castle County, Delaware. *Journal of Middle Atlantic Archaeology* 1:97-116.

Custer, J. F., P. Jehle, H. H. Ward, S. C. Watson

1986 Archaeological Investigations at the Arrowhead Farm Site Complex, Kent County, Maryland. *Maryland Archaeology*, Vol. 22. No. 2:20-35.

Custer, Jay F., Keith R. Doms, Kristen Walker, and Adrienne Allegretti

1996 Archaeological Investigations at 18KE128, Kent County, Maryland. *Maryland Archaeology*, Vol. 33, Nos. 1 & 2:45-58.

Custer, J. F., P. Jehle, H. H. Ward, W. C. Watson, and C. Mensack

n.d. Intensive Test Excavations at the Arrowhead Farm Complex. *Maryland Archaeology* (in press).

Danckaerts, Jasper

1913 *Journal of Jasper Danckaerts, 1679-1680*. Edited By Bartlett Burleigh James. Charles Scribners Sons. New York. Project Gutenberg eBook at https://www.gutenberg.org/cache/epub/23258/pg23258-images.html#Page_33

Davidson, Thomas

1993 The Powhatans and the Eastern Shore. *Powhatan Foreign Relations, 1500-1722,* Helen C. Rountree, ed. University Press of Virginia, Charlottesville.

Davidson, T. E., R. Hughes, J.M. McNamara

1971 Where are the Indian Towns?: Ethnohistory, and Manifestations of Contact on Maryland's Eastern Shore. *Journal of Middle Atlantic Archaeology* 1: 43-50.

Denny, J. Peter
1989 Algonquian Connections to Salishan and Northeastern Archaeology. *Actes du Vingtième Congrès des Algonquinistes*, edited by William Cowan, pp 86-107. Carleton University, Ottawa.

Dent, R. J.
1995 *Chesapeake Prehistory: Old Traditions, New Directions*. Interdisciplinary Contributions to Archaeology. Plenum Press, New York and London.

Denroche, Christopher T.
1893 *A Souvenir History of the Parish of St. Paul's, Kent County, Maryland*.

de Vries, David Pietersz
1655 Voyage to New Netherland, 1632-1644 (Short Historical and Journal Notes of Several Voyages made in fours parts of the World, namely Europe, Africa, Asia, and America). In *Voyages from Holland to America*. Henry Cruse Murphy, translator. Online at http://hdl.loc.gov/loc.gdc/gckb.032.

Dunnel, Robert C, and Willaim S. Dancey
1983 The Siteless Survey: A Regional Scale Data Collection Strategy. In *Advances in Archaeological Method and Theory* 6 267-287.

Earle, Swepson
1923 *The Chesapeake Bay Country*. Thomsen-Ellis Company. Baltimore.

Eastern Shore Heritage
2004 *Stories of the Chesapeake Heritage Area Management Plan*. Eastern Shore Heritage, Inc., Chestertown, Maryland.

Faull, Katherine M., David Minderhout, Kristal Jones, Brandn Green
2015 *Indigenous Cultural Landscapes Study for the Captain John Smith National Historic Trail: the Lower Susquehanna Area*. Bucknell University.

Feest, Christian
1978 Nanticoke and Neighboring Tribes. *Handbook of North American Indians, Volume 15: Northeast.* Bruce Trigger, ed., pp. 242-252. Smithsonian Institution, Washington, D.C.

Fenstermacher, D.E., M. C. Rabenhorst, M. W. Lang, G. W. McCarty, and B. A. Needelman
2014 Distribution, Morphometry, and Land Use of Delmarva Bays. In *Wetlands* 34:1219–1228. Published online at https://www.fs.usda.gov/nrs/pubs/jrnl/2014/nrs_2014_fenstermacher_001.pdf

Fiedel, Stuart J.
1990 Middle Woodland Algonquian Expansion: A Refined Model. *North American Archaeologist* 11(3):209–230.

1999 Algonquians and Iroquoians: Taxonomy, Chronology, and Archaeological Implications. In *Taming the Taxonomy: Toward a New Understanding of Great Lakes Archaeology*, edited by Ronald F. Williamson and Christopher M. Watts, pp 193–204. The Ontario Archaeological Society, Inc. East End Books, Toronto.

Fox, George
1910 Excerpts from the Journal of George Fox, 1672, 1673. In *Narratives of Early Maryland, 1633-1684*. Clayton, Colman Hall, editor. Charles Scribner's Sons, New York: 393-406.

Gallivan, Martin D.
2016 The Powhatan Landscape: An Archaeological History of the Algonquian Chesapeake. University of Florida Press. Gainesville, Florida.

George- Kane, Lois, and Vicki Kane
n.d. Duck Decoys. Smithsonian Institution, Infinity of Nations Exhibition. https://americanindian.si.edu/exhibitions/infinityofnations/california-greatbasin/134512.html#about

Gesta Septrionalus Blog Spot
2020 Virginia and the Chesapeake, Pt 2: Delmarva Peninsula http://gestaseptentrionalis.blogspot.com/2020/06/virginia-and-chesapeake-pt-2-delmarva.html Posted June 13, 2020. Accessed August 19, 2022.

Griffith Daniel
2022 Personal communication with John L. Seidel and Charles Fithian. Various dates.

Haile, Edmund Wright
1998 *Jamestown Narratives: Eyewitness Accounts of the Virginia Colony – The First Decade 1607-1617*. Roundhouse, Champlain, Virginia.

Hawks, Francis L.
1865 *A Relation of Maryland*. Reprinted from the London edition of 1635. J. Sabin, New York. Accessed online at the Library of Congress: https://www.loc.gov/resource/lhbcb.21595/?sp=49

Hesselius, Andreas
1947 The Remarks of Andreas Hesselius, Provost in Gagnef, About Some Strange Occurrences Which He Encountered During His Journey to America, During His

Sojourn Out There and During His Homeward Journey to Sweden, From the Year 1711 to 1724. *Inclusive Delaware History*, Vol. II, No. 2.

Jordan, Francis, Jr.

1895 Aboriginal Village Sites of New Jersey, Delaware, and Maryland. *The Archaeologist*, Vol. 3, No. 4:99-100, 137-139.

1906 *Aboriginal Fishing Stations on the Coast of the Middle Atlantic States*. New Era Printing Company. Lancaster, Pennsylvania.

Kavanagh, M.

1979 *Archaeological Reconnaissance of Proposed Channel Improvements in the Upper Chester Watershed, Kent and Queen Anne's Counties, Maryland*. Maryland Geological Survey File Report No. 147. Baltimore, Maryland.

Kenny, Hammill

1950 *The Origin and Meaning of Indian Place-Names of Maryland*. Doctoral dissertation, University of Maryland.

Kent, Barry C.

1989 *Susquehanna's Indians*. Anthropological Series Number 6. The Pennsylvania Historical and Museum Commission, Harrisburg.

Kent Conservation & Preservation Alliance

2019 *Preliminary Cultural Landscape Assessment of Kent County, Maryland*. Barton Ross & Partners, Robert McGinnis Landscape Architects, Washington College GS, and Kent Conservation & Preservation Alliance. Chestertown, Maryland.

Klingelhofer, Eric

n.d. *The Search for 'Ffort Conquest' and the Claiborne Virginian Settlement: An Archaeological Survey of Garrett Island, Cecil County, Maryland, 1984*. Manuscript on file at the Maryland Historical Trust, Crownsville, Maryland.

Lattanzi, Gregory D.

2007 The Provenance of Pre-Contact Copper Artifacts: Social Complexity and Trade in the Delaware Valley. In *Archaeology of Eastern North America*, Vol. 35 (2007), pp. 125-137.

Lawrence, John

2018 Pocahontas on the Delaware: The Intersection of History and Legend in the Historiography of New Jersey. *Sojourn Journal*. Stockton University, Online at Academia.com:

https://www.academia.edu/33626948/POCAHONTAS_ON_THE_DELAWARE_The_Intersection_of_History_and_Legend_in_the_Historiography_of_New_Jersey

Lippson, A. J.

1973 *The Chesapeake Bay in Maryland: An Atlas of Natural Resources*. The Johns Hopkins University Press, Baltimore and London.

Lowery, D. L.

1992 *The 1992 Archaeological Survey of Kent Island*. Manuscript on file at the Maryland Historical Trust. Crownsville, Maryland.

1993a *A Supplementary Report of the 1992 Archaeological Survey of Kent Island*. Manuscript on file at the Maryland Historical Trust. Crownsville, Maryland.

1993b *Archaeological Survey of the Chester River, the Wye River, and the Prospect Bay Drainages, Queen Anne's County, Maryland*. Manuscript on file at the Maryland Historical Trust. Crownsville, Maryland.

1994 *Archaeological Survey of Interior Queen Anne's County, Maryland.* Manuscript on file at the Maryland Historical Trust. Crownsville, Maryland.

1995 *A Supplementary Archaeological Survey of Interior Queen Anne's County, Maryland*. Manuscript on file at the Maryland Historical Trust. Crownsville, Maryland.

Luckenbach, Al, Wayne E. Clark, and Richard S. Levy

1987 Rethinking Cultural Stability in Eastern North American Prehistory: Linguistic Evidence from Eastern Algonkian. *Journal of Middle Atlantic Archaeology* 3:1–34.

McNamara, J. M.

1985 Excavations on Locust Neck: The Search for the Historic Indian Settlement in the Choptank Indian Reservation. *Journal of Middle Atlantic Archaeology* 1: 87-96.

Marye, William B.

1936a Indian Paths of the Delmarva Peninsula. *Bulletin of the Archaeological Society of Delaware,* Vol. 2, No. 3.

1936b Indian Paths of the Delmarva Peninsula. *Bulletin of the Archaeological Society of Delaware,* Vol. 2, No. 4.

1937 Indian Paths of the Delmarva Peninsula, Part Two: The Choptank Indians. *Bulletin of the Archaeological Society of Delaware,* Vol. 2, No. 5.

1938a Indian Paths Near the Seaboard. *Bulletin of the Archaeological Society of Delaware,* Vol. 2, No. 6.

1938b The Wicomiss Indians of Maryland. *American Antiquity*, Vol. 4, No. 2: 146-152.

1939 Indian Towns of the Southeastern Part of Sussex County" [pt 1]. *Bulletin of the Archaeological Society of Delaware.* Vol. 3, No. 2.

1940 Indian Towns of the Southeastern Part of Sussex County" [pt 2]. *Bulletin of the Archaeological Society of Delaware.* Vol. 3, No. 3.

Maryland Archaeological Conservation Lab

n.d. Diagnostic Artifacts in Maryland. Available online at: https://apps.jefpat.maryland.gov/diagnostic/index.htm

Maryland Historical Trust MEDUSA

n.d. MEDUSA – Maryland's Cultural Resource Information System. Available online (archaeology data are restricted): https://mht.maryland.gov/secure/medusa/

Maryland Humanities Council – History Matters!

2001 *Interpretive Plan for the Lower Susquehanna Heritage Greenway*. Maryland Humanities Council. Baltimore, Maryland.

Maryland Manual

n.d. Maryland at a Glance: Native Americans – People, Tribes, and Bands. *https://msa.maryland.gov/msa/mdmanual/01glance/native/html/01native.html*

Maryland Shell Fish Commission

1909 *Natural Oyster Bars, Kent County, Maryland*. Chart No. 28. Maryland Shell Fish Commission

Matthews, E. D., and W. U. Reybold III

1966 *Soil Survey: Queen Anne's County, Maryland.* United States Department of Agriculture Soil Conservation Service. Washington, D. C.

McAvoy, William A., and Jason W. Harrison

2012 Plant Community Classification and the Flora of Native American Shell-middens on the Delmarva Peninsula. In The Maryland Naturalist 52(1):1-34.

McKnight, Justine Woodard

2013 *Archeobotanical Remains from Indiantown Farm 18QU285, 2013 Field Season*. Letter Report on file at Washington College and available online at: https://apps.jefpat.maryland.gov/archeobotany/ReportPages/18QU485-ArcheobotanicalLetterReport.pdf

Miller, Henry
2001 Living Along the "Great Shellfish Bay." In *Discovering the Chesapeake: The History of an Ecosystem*, edited by Philip D. Curtin, Grace Somers Brush, and George Wescott Fisher. Johns Hopkins University Press.

Murray, V.S.G.
1996 Toxic Plants. In *Human Toxicology*. Jaques Descotes, editor. Elsevier. Pp. 731-756.

National Park Service
n.d. *Indigenous Cultural Landscapes*. Captain John Smith Chesapeake National Historic Trail. https://www.nps.gov/cajo/learn/indigenous-cultural-landscapes.htm

2011 Final Comprehensive Management Plan and Environmental Assessment. Captain John Smith Chesapeake National Historic Trail. U.S. Department of the Interior, Washington D.C.

Native American Ethnobotany Database
n.d. Native American Ethnobotany Database: A Database of Foods, Drugs, Dyes and Fibers of Native American Peoples, Derived from Plants. Accessed online at http://naeb.brit.org/

Pendergast, James F.
1991 *The Massawomeck: Raiders and Traders into the Chesapeake Bay in the Seventeenth Century*. The American Philosophical Society. Philadelphia.

Pohuski, Michael
1991 The Underwater Search for William Claiborne's 17th-Century Settlement in the Upper Chesapeake. *Underwater Archaeology Proceedings from the Society for Historical Archaeology Conference*. John D. Broadwater, ed. Society for Historical Archaeology, Richmond, Virginia.

Project Scope of Work
n.d. *Chester River ICL Scope of Work*. Chesapeake Conservancy and the National Park Service.

Rountree, Helen C.
1989 The Evolution of the Powhatan Paramount Chiefdom in Virginia. In *Chiefdoms and Chieftaincy in the Americas*, pp. 265–296. University Press of Florida, Gainesville.

Rountree, Helen C., and Thomas E. Davidson
1997 *Eastern Shore Indians of Virginia and Maryland*. University of Virginia Press. Charlottesville.

Rountree, Helen C., Wayne E. Clark, and Kent Mountford
2007 *John Smith's Chesapeake Voyages, 1607-1609*. University Press of Virginia. Charlottesville.

Sassafras River Association
2009 Sassafras River Watershed Characterization, Appendix F in the *Sassafras Watershed Action Plan*. Accessed online at https://mde.maryland.gov/programs/Water/319NonPointSource/Documents/Watershed%20Plans/A-I_EPA_Accepted_Plans/Sassafras-SWAP.pdf

Scharf, J. Thomas
1879 *History of Maryland: From the Earliest Period to the Present Day*, Vol. 1. Tradition Press, Hatboro. 1967 reprint of 1879 edition.

Seidel, John L.
2005 *Submerged Cultural Resources Survey of Portions of the Chester River, Maryland.* Washington College Public Archaeology Laboratory, Chestertown, MD.

2007 *Mapping the Past for the Future: A Cultural Resource Geographic Information System & Archaeological Predictive Modeling for the Upper Eastern Shore of Maryland.* With Darrin Lowery & Wendy Miller. 2 volumes. Center for the Environment & Society, Washington College, Chestertown, Maryland.

2009 *The Chester River: Feasibility Study for Nomination as a Connector Trail in the John Smith National Historic Trail*. Report for the Conservation Fund and the Friends of the John Smith Chesapeake Trail. Center for Environment & Society, Washington College.

2010 *The Choptank River: Feasibility Study for Nomination as Connector Trail in the John Smith National Historic Trail*. With contributions from Ralph Eshelman, Elizabeth Seidel, and Darrin Lowery. Report for the Conservation Fund and the Friends of the John Smith Chesapeake Trail. Center for Environment & Society, Washington College.

2011 *Archaeology Field Manual*, *Washington College Archaeology*. Washington College Public Archaeology Lab. Chestertown, Maryland.

2021 *Non-Invasive Archaeological Survey of Rodgers Tavern Museum and Lower Ferry Park*. Washington College Center for Environment & Society, Chestertown, Maryland.

Seidel, John L., Darrin Lowery, and Wendy Miller

2007 *Mapping the Past: A Cultural Resource Management Geographic Information System & Archaeological Predictive Model for Maryland's Eastern Shore: Cecil, Kent, Queen Anne's, Caroline & Talbot Counties.* Public Archaeology Laboratory & the Center for the Environment & Society.

Seidel, John L., Darrin Lowery and Tom Davis

2004 *A Cultural Resource Management Geographic Information System and Archaeological Predictive Model for Kent and Queen Anne's Counties, Maryland*. Report prepared for the Maryland State Highway Administration by Washington College Public Archaeology Laboratory, Chestertown, Maryland.

Seidel, John L., and Wendy Miller

2007 *A User's Guide to the Cultural Resource Management Geographic Information System & Archaeological Predictive Model for Maryland's Eastern Shore: Cecil, Kent, Queen Anne's, Caroline & Talbot Counties.* With Wendy Miller. Report to the Maryland State Highway Administration, Baltimore, Maryland. Public Archaeology Laboratory & the Center for the Environment & Society, Chestertown, Maryland.

Seidel, John L. and Darrin Lowery

2008 *Interim Report on the Kent County Archaeological Survey & Predictive Model Testing 2005-2008*. Report to the Maryland Historical Trust, Crownsville, Maryland. Public Archaeology Laboratory & the Center for the Environment & Society, Chestertown, Maryland.

Seidel, John L. and William Schindler

2012 *Evaluation of Archaeological Testing & Predictive Modeling on Maryland's Upper Eastern Shore – 2009 Investigations.* Report to the Maryland Historical Trust, Crownsville, Maryland. Public Archaeology Laboratory & the Center for the Environment & Society, Chestertown, Maryland. January.

Shaw, Robert

1974 Early American Decoys. Reprinted online from *Early American Life*: http://www.roberteshaw.com/earlydecoys.html

Shumway, Sandra

1996 Natural environmental factors. *The Eastern Oyster Crassostrea virginica*, pp. 467-513. Edited by V.S. Kennedy, R.I.E. Newell, and A.F. Eble. Maryland Sea Grant College, College Park.

Sipe, Chester Hale
1927 The Indian chiefs of Pennsylvania, or A story of the part played by the American Indian in the history of Pennsylvania. Ziegler Print Co. Butler, Pennsylvania.

Smith, Huron H.
1932 Ethnobotany of the Ojibwe Indians, in *Bulletin of the Public Museum of Milwaukee* 4:327-525.

Smith, John
1986a *The Proceedings of the English Colonie in Virginia*. Philip L. Barbour (ed.), 3 vols. 1:199-289. University of North Carolina Press, Chapel Hill.

1986b A Map of Virginia. In *The Complete Works of Captain John Smith (1580-1631*), Philip L. Barbour (ed.), 3 vols. 1:119-190. University of North Carolina Press, Chapel Hill.

1986c Generall Historie of Virginia, New-England, and the Summer Isles. In *The Complete Works of Captain John Smith (1580-1631*), Philip L. Barbour (ed.), 3 vols., 2:25-488. University of North Carolina Press, Chapel Hill.

Spelman, Henry
1613 Relation of Virginia, edited by John Smith, pp. ci–xxiv. In *The Travels and Works of Captain John Smith*, edited by Philip L. Barbour, pp. 119–289. University of North Carolina Press, Chapel Hill.

Spencer, Darla S.
n.d. Buffalo Mask. E-WV, *The West Virginia Encyclopedia*. Accessed online at: https://www.wvencyclopedia.org/articles/703

Strachey, William
1612 The History of Travel into Virginia Britannia: The Book of the First Decade [1612]. *Jamestown Narratives*, Edmund Wright Haile, ed. Roundhouse, Champlain, Virginia. 1998.

Strickland, Scott M., Virginia R. Busby, and Julia A. King
2015 *Defining the Indigenous Cultural Landscape for the Nanjemoy and Mattawoman Creek Watersheds*. Prepared for the National Park Service, Chesapeake Bay, Annapolis, Maryland. Available online at http://www.nps.gov/chba/learn/news/upload/NanjemoyMattawoman-ICL-FINAL-red.pdf. St. Mary's City: St. Mary's College of Maryland.

Strickland, Scott M., and Julia A. King
2016 *Developing Priority Watershed Areas for Mapping Indigenous Cultural Landscapes of the Greater Chesapeake Ba*y. Prepared for the National Park

Service, Chesapeake Bay, Annapolis, Maryland. Available online at: https://www.nps.gov/cbpo/learn/news/upload/NPS-ICLPriority-FinalReport.pdf. St. Mary's City: St. Mary's College of Maryland.

Strickland, Scott M., Julia A. King, G. Anne Richardson, Martha McCartney, and Virginia R. Busby
2016 *Defining the Rappahannock Indigenous Cultural Landscape*. Prepared for the National Park Service, Chesapeake Bay, Annapolis, Maryland. St. Mary's City: St. Mary's College of Maryland.

Strickland, Scott M., Julia A. King, and Martha McCartney
2019 *Defining the Greater York River Indigenous Cultural Landscape*. Prepared for the National Park Service & Colonial National Historical Park, Chesapeake Conservancy. St. Mary's City: St. Mary's College of Maryland.

Sullivan, Scott M., Kristin M., Erve Chambers, and Ennis Barbery
2013 *Indigenous Cultural Landscapes Study for the Captain John Smith Chesapeake National Historic Trail.* The University of Maryland, College Park, MD.

Tibert, Neil E., and Lindsay J. Walker, William P. Patterson, J. Bradford Hubeny, Emma Jones, Olivia R. Cooper
2012 A Centennial Record of Paleosalinity Change in the Tidal Reaches of the Potomac and Rappahannock Rivers, Tributaries to Chesapeake Bay. *Virginia Journal of Science.* Volume 63, Issue 3 & 4: 111-128.

Torrence, Clayton
1948 The English Ancestry of William Claiborne of Virginia. *The Virginia Magazine of History & Biography* 56(4) Part II. Virginia Historical Society, Richmond.

Tuan, Yi-Fu
1977 *Space and Place: the Perspective of Experience*. Minneapolis: University of Minnesota Press.

Virginia Colonial Records Project
n.d. Microfilm records of the Public Records Office - William Claiborne and Kent Island. Reel 93. Alderman Library of the University of Virginia, Charlottesville.

Wandsnider, Luann, and Eileen L. Camilli
1992 The Character of Surface Archaeological Deposits and Its Influence on Survey Accuracy. *Journal of Field Archaeology* 3:319-384.

Weslager, C.A.
1942 Indian Tribes of the Delmarva Peninsula. *Bulletin of the Archaeological Society of Delaware.* 3(5): 25-36.

1943 The Nanticoke Indians in Early Pennsylvania History. In *The Pennsylvania Magazine of History and Biography*, Vol. 67, No. 4 (Oct., 1943), pp. 345-355.

White, Andrew

1899 A Relation of the Sucessefull Beginnings of the Lord Baltimore's Plantation in Maryland. Being an extract of certaine Letters written from thence, by some of the Aduenturers, to their friends in England. *The Calvert Papers*, Volume 3, Maryland Historical Society Fund Publications 28, 34 - 35, Baltimore.

White, E. A.

1982 *Soil Survey of Kent County, Maryland*. United States Department of Agriculture, Soil Conservation Service. Washington, D. C.

Wilke, Steve, and Gail Thompson

1974 *Report of the 1972-1973 Field Activities of the Kent County Archaeological Research Project*. University of Washington, Department of Anthropology. Seattle.

1977 *Archaeological Survey of Western Kent County*. University of Washington, Department of Anthropology. Seattle.

1979 *Kent County Prehistoric Land Use Study.* 2 volumes. University of Washington, Department of Anthropology. Seattle.

Willard, Debra A., Thomas Cronin, and Stacey Verado

2003 *Late-Holocene climate and ecosystem history from Chesapeake Bay sediment cores, USA.* U.S. Geological Survey. University of Nebraska, Lincoln, Digital Commons. https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1918&context=usgsstaffpub

Williamson, Margaret Holmes

2008 *Powhatan Lords of Life and Death: Command and Consent in Seventeenth-Century Virginia*. University of Nebraska Press.

Wroth, Peregrine

n.d. Peregrine Wroth Papers, Washington College Archives. Chestertown, MD.