

# INTERPRETIVE PLAN

## Captain John Smith Chesapeake National Historic Trail

*Join the Adventure!*



*Through interpretation, understanding,  
through understanding, appreciation,  
through appreciation, protection.*



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## SECTION 1: INTRODUCTION

### *Captain John Smith Chesapeake National Historic Trail*

The Captain John Smith Chesapeake National Historic Trail commemorates the explorations of Captain Smith on the Chesapeake Bay and its tributaries in 1607-1609, tracing approximately three thousand miles of his voyage routes. It is the first national water trail and is administered by the National Park Service (NPS) through the Northeast Region's Chesapeake Bay Office. The Trail traverses portions of Virginia, Maryland, Delaware, and the District of Columbia.

#### **Legislative History**

Two bills introduced in the United States Congress (entitled the Captain John Smith Chesapeake National Historic Watertrail Study Act of 2005) authorized the Secretary of the Interior to “carry out a study of the feasibility of designating the Captain John Smith Chesapeake National Historic Watertrail as a national historic trail.” Senator Paul S. Sarbanes (Maryland) introduced S. 336 on February 9, 2005, and Senators George Allen (Virginia), Joseph R. Biden, Jr. (Delaware), Barbara A. Mikulski (Maryland), and John Warner (Virginia) cosponsored it. The bill was referred to the Committee on Energy and Natural Resources Subcommittee on National Parks on April 28. On May 24, Representative Jo Ann Davis (Virginia) introduced H.R. 2588 in the House of Representatives, and 24 other representatives from the four relevant states signed on as cosponsors. The bill, which was identical to the Senate's version (S. 2568), was referred to the House Committee on Resources as H.R. 5466 on May 24, and to the Subcommittee on National Parks on May 31.

On August 2, 2005, President George W. Bush authorized the NPS to study the feasibility of establishing the Captain John Smith Chesapeake National Historic Trail as part of the FY 2006 Interior, Environment and Related Agencies Appropriations Act (P.L. 109-54). The Act also directed the Secretary of the Interior to consult with federal, state, regional, and local agencies, and representatives of the private sector, including the entities responsible for administering the Chesapeake Bay Gateways and Watertrails Network (P.L. 105-312) and the Chesapeake Bay Program authorized by the Federal Water Pollution Control Act (33 U.S.C. 1267). The feasibility study was completed and published in July 2006.

H.R. 5466 passed the House on December 5, 2006. In the Senate, Senator Paul Sarbanes (Maryland) spoke in support of S. 2568. A summary of his comments can be found in **Appendix A**; excerpts include:

The Captain John Smith Chesapeake National Historic Trail Designation Act would create the Nation's first national “watertrail” and honor one of America's earliest

explorers, Captain John Smith, and the vital role he played in the founding of the first permanent English settlement in North America at Jamestown, Va., and in exploring the Chesapeake Bay region during the years 1607 to 1609.

Many Americans are aware of the upcoming 400th anniversary of Jamestown next year. The celebration is expected to draw record numbers of visitors to this area, including Queen Elizabeth II, as part of her recently announced state visit. What may not be as well known is that Jamestown and John Smith's voyages of exploration in present-day Virginia and Maryland were our Nation's starting points. America has its roots right here in the Chesapeake Bay region nearly 400 years ago—13 years before the founding of the Plymouth colony—when the Jamestown colonists disembarked from their three small ships on May 13, 1607. Under the leadership of Captain John Smith, the fledgling colony not only survived but helped ignite a new era of discovery in the New World. . . .

The Captain John Smith Chesapeake National Historic Trail Act comes at a very timely juncture to educate Americans about historical events that occurred 400 years ago right here in Chesapeake Bay, which were so crucial to the formation of this great country and our democracy. I urge my colleagues to support this measure.

S. 2568 passed the Senate on December 7.

On December 19, 2006, President George W. Bush signed the legislation (P.L. 109-418) establishing the Captain John Smith Chesapeake National Historic Trail.

After the president signed the bill, Senator Sarbanes said, "The signing of this legislation marks a new beginning in highlighting the historic voyages of Captain John Smith as part of the early exploration and development of our Nation. I applaud the hard work of my colleagues Senator John Warner and Congresswoman Jo Ann Davis, as well as Patrick Noonan and The Conservation Fund in working to make the Nation's first watertrail a reality." Senator John Warner (Virginia) said, "This visionary legislation brings to life the voyages of John Smith in 1608 and his encounters with Native American tribes, and traces his descriptions of the living resources in the Bay. It will also strengthen our efforts to stimulate heritage tourism for Chesapeake communities, and to restore the health of the Bay." Representative Jo Ann Davis said, "The President's signature today of the Captain John Smith Chesapeake National Historic Trail is historic in many ways. Not only does it officially commemorate and designate the voyages of Captain John Smith in the New World, it also establishes the first national watertrail along the beautiful Chesapeake Bay.

I cannot think of a more fitting way to add to the celebration of the 400th anniversary of the settlement at Jamestown.”

The Chesapeake Bay Gateways and Watertrails Network, administered by the NPS, provides a framework for development of the National Historic Trail. The Network, authorized by Congress in 1998 and established in 2000, links a diverse array of Bay watershed venues: federal, state, county and private non-profit parks; wildlife refuges; historic sites; museums; educational institutions; existing water trails; and other assets. The 160 plus sites and connector routes within the Network strive to help people: a) access the special places and resources of the Bay through information and facilities; b) better understand the Chesapeake through education and interpretation; and c) engage in conservation stewardship related to the Bay’s natural, cultural, historical and recreational resources. Providing programs, guided experiences and facilities/services geared toward connecting people to the Bay is a prerequisite for entry into the Network.

### **Purpose**

The purpose of the Captain John Smith Chesapeake National Historic Trail is to commemorate the exploratory voyages of Captain Smith on the Chesapeake Bay and its tributaries in 1607-1609; to share knowledge about the American Indian societies and cultures of the seventeenth century; and to interpret the natural history of the Bay (both historic and contemporary). Complementing the Chesapeake Bay Gateways and Watertrails Network, the Trail will provide new opportunities for education, recreation, eco-tourism, and heritage tourism in the Chesapeake Bay region.

The overarching goal of the Captain John Smith Chesapeake National Historic Trail is to foster citizen stewardship of the Bay. As noted in the feasibility study, “In providing a focus on and appreciation of the resources associated with Smith’s voyages, the trail would help to facilitate protection of those resources.” The Trail provides yet another forum for acknowledging the changes that have occurred in the Chesapeake region over the last 400 years. It can serve to stimulate a sense of urgency in people to mitigate the changes that we can, and to chart a future course that demonstrates a commitment to conserving the remaining values of the great Chesapeake.

### **Significance**

The National Historic Trail is considered to be nationally significant for the Chesapeake Bay and river voyages of Captain John Smith it commemorates. These voyages first revealed to Europeans the complexity and richness of the Chesapeake Bay region. Smith’s maps and writings spurred the development of Great Britain’s Mid-Atlantic

“With our present understanding of how ecosystems operate, scientists fear that we cannot return to the environmental conditions present four centuries ago. However, we must hold in our minds a clear picture of this pre-European ecosystem, how it changed, and what potential is there for restoration. This is extremely important when we set environmental goals for the future bay, for our children’s children, for the bay four hundred years from now.”

—Robert Carter, Historic Preservation Officer, Virginia Department of Historic Resources

colonies, and influenced colonial affairs for more than a century. The voyages impacted native inhabitants by accelerating the processes that destroyed the Powhatan polity and disrupting the native peoples' lifeways throughout the Mid-Atlantic region, establishing the primacy of English culture in the region and beyond. English settlement in the region marked the beginning of significant human influence on the transformation of the Bay's environment.

***Exploratory Voyages of Captain Smith on the Chesapeake Bay and its Tributaries in 1607-1609:***

Captain John Smith's explorations of the Chesapeake Bay and its tributaries formed the basis of his published writings and maps. Those publications, in turn, encouraged English settlement of Virginia, the Bay area, and the Eastern Seaboard. They also suggested a policy of private land ownership that the Virginia Company and the Crown eventually adopted. This policy, and the success of the English colonization, significantly altered the environment of the Bay.

Smith's publications were unique for the time because he wrote at length from his own experience (albeit sometimes exaggerated), his own observations, and his attempts to understand what he had done and seen and describe it for a distant audience. His maps were so accurate the colonists found them useful for most of the rest of the 17<sup>th</sup> century, and modern archeologists have employed them to locate Indian towns. Smith's accounts have profoundly influenced our assumptions about the early colonial experience, and certain aspects – such as the story of Pocahontas – have even entered the popular culture.

***American Indian Societies and Cultures of the 17<sup>th</sup> Century:***

The Chesapeake Bay region of 1608 was home to thousands of native people who lived along its shores and tributaries in large and small towns. They belonged to a complex society consisting of tribes, clans, chiefdoms, and other polities. The Chesapeake Bay Indians hunted, fished, and farmed, both preserving and altering their environment. They used the natural world for their subsistence in a manner that sustained over the long term the bounty on which they depended for survival. They also maintained an elaborate trading and communication network that extended for hundreds of miles, even to the Great Lakes. The English newcomers consistently underestimated the sophistication of the native world they were invading.

John Smith's writings offer an insightful (though biased) glimpse into this world. His writings reveal that the success of his Bay journey, as well as the survival of the English colony itself, depended largely on the goodwill and assistance of the Chesapeake Bay Indians. Comparing Smith's writings to his maps, it is also apparent that he relied on the native people for information about rivers and lands he had neither the time nor the means to explore.

Our present understanding of the native world of Smith's time comes not only from Smith's writings but the subsequent work of archeologists and anthropologists. A host of publications, many of them issued in the last dozen years, have in some cases confirmed and in other cases contradicted what Smith thought he understood about the native

peoples, their leaders, and their lives. More importantly, many descendants of the Chesapeake Bay Indians still live in their ancestral homeland, enriching modern Americans' experience with the Bay and its environment. Although the Bay's native inhabitants were largely displaced by the newcomers to America, their continued presence through their descendants offers an opportunity for visitors to understand their role in utilizing, altering, and preserving the Bay and its resources.

### ***Natural History of the Bay of the 17<sup>th</sup> Century:***

When Smith explored the Bay and its tributaries in the summer of 1608, he found an abundance of natural resources, including fish, birds, mammals and plant life. Smith had harvested deer, turkeys and fish while in Jamestown. He had also observed oyster beds in that area, but it wasn't until he explored the Bay that he discovered the extent of the vast domain these beds occupied.

The Bay's natural resources, as Smith reported them in his published works, helped attract English settlement. The wildlife provided a base of sustenance for European colonists, the trees were used to construct their houses and vessels, and the land was transformed into farmsteads. Until recent times, when pollution and overuse reduced the Bay's resources, the harvesting of fish and oysters constituted a major industry for Bay-area residents.

Efforts to improve the Bay's environment and restore its natural resources have been underway for years with limited success. Although the Bay will never again look like it did in Smith's time or contain the vast array of floral and faunal life he observed, portions of it still convey some sense of what he saw and experienced.

The complete Statement of National Significance for the Captain John Smith Chesapeake National Historic Trail is in **Appendix B**.

## ***Trail Interpretive Plan***

### **Interpretation**

In his groundbreaking book, *Interpreting Our Heritage*, Freeman Tilden defined interpretation as, "An educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media..." and "...the revelation of a larger truth that lies behind any statement of fact."

"Through interpretation, understanding;  
through understanding, appreciation;  
through appreciation, protection."

-National Park Service  
*Administrative Manual* (pg. 38)

Through interpretation, visitors to the Captain John Smith Chesapeake National Historic Trail will fully embrace the diversity and richness of the Chesapeake, will gain a sense of ownership, and will become inspired stewards of this national treasure.

Currently, any adventurer can attempt to retrace the exploratory routes Smith and his crew traveled in 1607-1609 on the Chesapeake. The Captain John Smith Chesapeake National Historic Trail will provide an integrated, systematic approach to public exploration of the treasures of the Chesapeake region. The Trail will offer a continuum of linked experiences and unified stories and messages related to the Chesapeake's watershed. Individual sites and stories will be interconnected like the links in a chain. Information, access, facilities and services will aid visitors in discovering and touring both water and land segments of the Trail.

An array of diverse interpretive opportunities will enable visitors to explore the nooks and crannies of the Chesapeake region, and step back in time and envision the people and events that shaped the Bay. Through storytelling and guided exploration, visitors and area residents will gain a deeper understanding and appreciation of the Bay's incomparable resources. Visitors will also be able to understand the urgent need for conservation and restoration of Bay resources; feel inspired to help protect this national treasure; and seek opportunities to engage in stewardship activities.

“Not the least of the fruits of adequate interpretation is the certainty that it leads directly toward the very preservation of the treasure itself, whether it be a national park, a prehistoric ruin, an historic battlefield or a precious monument of our wise and heroic ancestors. Indeed, such a result may be the most important end of our interpretation, for what we cannot protect we are destined to lose.”

*-Freeman Tilden, interpreter and author*

## **Basis of the Plan**

In late 2007 and early 2008, the NPS hosted eleven interpretive scoping meetings throughout the Chesapeake Bay region, from Jamestown, Virginia to Havre de Grace, Maryland and including Seaford, Delaware. (A complete meeting series schedule and a report of the key findings are included in **Appendix C**.) Existing and potential partners participated in the meetings, including Gateways managers; local, state and federal government officials; historians; American Indian tribal representatives; journalists; outfitters; tourism officials; and business owners. The National Park Service (NPS) asked participants to share their views regarding special places associated with the Bay; important stories and conservation messages; potential methods for interpretation along the Trail; early implementation strategies for Trail development and interpretation; and potential Trail partners. More than 200 stakeholders provided valuable ideas and information related to promotion, development and interpretation of the Trail.

## **Purpose of the Plan**

An Interpretive Plan is an important component within the planning hierarchy of the NPS. It is coordinated with the Comprehensive Management Plan (CMP) for a site, a unit or a trail. The CMP for the Captain John Smith Chesapeake National Historic Trail establishes the administrative objectives, policies, processes, and management actions needed to fulfill the preservation and public use goals established under the authorities of the National Trails System Act, as amended (16 USC 1241-1251). The CMP provides a framework for a wide range of partnership activities that are possible and desirable to provide for public use and understanding of Trail history and for public appreciation of Trail resources.

This Interpretive Plan will help guide the NPS and federal, state, and local partners over the next five years in efforts to:

- Orient visitors to the Trail's recreational opportunities;
- Interpret the Trail's natural features and human history with an emphasis on contrasting the Bay of 1600 with the Bay of today; and
- Instill an appreciation of Bay resources and a sense of stewardship in all who experience components of the Trail.

The plan identifies key interpretive themes, describes target audiences, and outlines visitor experience goals. It recommends ways to effectively convey stories and messages, and methods to achieve visitor experience goals through educational programs (e.g., guided tours and environmental education), interpretive media (e.g., publications, exhibits, waysides, and websites), facilities (e.g., access areas and overlooks), and visitor services.

The plan serves as the keystone of the interpretive planning process. To achieve and be accountable for the long-term goals of the plan, annual implementation plans with specific benchmarks will be developed by the NPS, and individual partners. The NPS will compile and maintain an Interpretive Database to archive the various planning efforts. Successful implementation of the recommendations described in this plan is dependent on the ongoing commitment and actions of all of the partners.

## **Common Threads**

Although the entities associated with the Captain John Smith Chesapeake National Historic Trail are varied, the partners and audiences share many common beliefs, desires and expectations regarding the Trail. During the series of interpretive scoping meetings and through additional consultations, some overarching ideas emerged, including the following:

### ***The Trail ...***

- is not a static entity; it will evolve to provide new opportunities
- will include land and water segments
- will provide an opportunity to reach/educate the next generation

### ***Audiences and Users will include ...***

- a broad array of users with specialized and often multiple interests
- people representing a wide spectrum of ages (multi-generational) and demographics
- local residents (noted as a key audience)
- virtual users (noted as perhaps just as important an audience as on-site visitors)

### ***Trail Experiences and Opportunities may include ...***

- opportunities for people to be refreshed, renewed, educated, and inspired
- opportunities for people to experience quiet and serenity
- opportunities for people to experience all four seasons in the Bay region
- enticing people out of their cars and onto the water and/or land
- an emphasis on appropriate and compatible low impact experiences
- the chance to embrace a truly unique “American experience”

### ***Concepts and Objectives...***

- “Imagine, if you can, a world without roads”
- accurately interpret the cultures of American Indians as they existed prior to European contact
- depict the impacts of Smith’s voyages and European settlement on the native peoples and the Bay environment
- portray the richness and bounty of the Bay in 1600 (“a veritable Garden of Eden”)
- convey the beauty of the Bay today (there’s ...“a lot out there that can stop the heart”)
- share public pride in farming, water-related work and travel, small town charm, literature and human history in the region
- expose people to the continuity of the human experience on the Chesapeake
- interpret the ecological and historical connections between communities and waterways throughout the watershed
- compare the Bay of 1600 to the Bay of today to help promote a sense of urgency for protecting what we have and restoring what we can
- make the connection between human history and environmental changes (people have always responded to their environment and impacted it, as well)
- inspire people to feel hope for the future of the Bay
- build public awareness of and support for conservation and restoration efforts
- motivate visitors to stay (in the region) longer to support local communities

### *Early Implementation ...*

- reach out to people (where they are) and share the Trail's message
- produce, publicize and make connections
- create a "Coming Soon" sign to create a sense of anticipation
- collect stories (from residents, particularly the elders)
- create a baseline and a process for measuring success
- create websites
- integrate Trail information with school curriculums
- institute a Bay passport or passbook
- develop pre-packaged experiences
- provide opportunities for people to create their own itineraries

## **SECTION 2: BACKGROUND**

### *Historical Overview*

#### **The Chesapeake Bay Region and Its People in 1607**

About four centuries ago, the large body of relatively shallow water - today called Chesapeake Bay - was the center of the world for people who had been living along its shores and tributaries for thousands of years. Large rivers and small streams flowed into the Bay from the east and the west, serving the inhabitants as liquid highways. The Bay teemed with aquatic life that enriched the rivers and streams: sturgeon, striped bass, menhaden, white perch, eels, crabs, oysters, mussels, and clams were all found in great abundance. A deep forest covered most of the land around the Bay. Some of it was ancient, with massive trees, scant undergrowth, and occasional meadows. Oak, hickory, chestnut and pine abounded, and deer, squirrel, rabbit, opossum, raccoon, bear, fox, wolf, bobcat, and beaver were among the common mammals of the Chesapeake woods, fields, and watercourses.

Archeologists estimate that prior to the arrival of Europeans, probably <sup>1</sup>about 50,000 Algonquian-, Iroquoian-, and Siouan-speaking Native Americans occupied the 64,000 square-mile Chesapeake Bay watershed. Captain John Smith mapped <sup>2</sup>more than 200 "leader" and "commoner" towns throughout the Bay region during 1607-1609. The variety of native peoples who lived in the region had developed sophisticated societies with arts and architecture, clearly defined systems of government, well-established trade routes, political and military alliances, and deeply held spiritual beliefs. A number of polities throughout the region governed the peoples. Social structures and systems of

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<sup>1</sup> Estimates regarding the population of American Indians in the Chesapeake in 1607 vary greatly; reference: *John Smith's Chesapeake Voyages 1607-1609*, pg. 317.

<sup>2</sup> Reference: *John Smith's Chesapeake Voyages 1607-1609*, pg. 34.

etiquette guided their personal and intra-tribal interactions. A complicated web of trading networks spread their goods over hundreds of miles. Worldviews that joined elements into a seamless whole formed the foundation of their religions.

The native peoples used the Chesapeake Bay and its tributaries for transportation, migration, communication, settlement and trade. The Bay served to link the coastal communities with other societies as far away as present-day Ohio and the Great Lakes. A vast network of rivers and footpaths connected the American Indians of the eastern seaboard with those of the Great Lakes and Canada. Items of value were dug from the earth, derived from plants and crafted from shells (including scarce blue beads), and then transported by canoe or on foot from one place to another. Haggling and sharp trading practices were part of the native peoples' economy as well.

### **The English and the Native Peoples**

A group of explorers from across the Atlantic Ocean entered this world in 1607. They hailed from England, a country ruled by a king whose power was tempered by Parliament. These

“We demanded [of Amoroleck] why they [the Mannahoac] came in that manner to betray us that came to them in peace and to seek their loves. He answered they heard we were a people come from under the world to take their world from them.” -*Captain John Smith, The Generall Historie (1624)*

newcomers represented a private stock company, the Virginia Company of London, whose objective was to establish a colony in the Chesapeake Bay region and exploit the resources there for the benefit of the investors.

When Captain John Smith set off on his voyages in the summer of 1608, at least five major American Indian polities appear to have dominated the Chesapeake Bay region: Powhatan, Piscataway, Susquehannock, Delaware, and Nanticoke. The Powhatan called their territory Tsenacomoco, occupying most of southeastern Virginia along the western side of the Bay, roughly from its mouth north to the Potomac River. The Piscataway held sway farther north into present-day central Maryland, likewise on the western side of the Bay. The Susquehannock dominated from the head of the Bay north into modern Lancaster and York Counties, Pennsylvania, along the Susquehanna River. Farther east, the Delaware were preminent. To the south, the Nanticoke inhabited the Delmarva Peninsula.

The newcomers interacted first with the Powhatan. The worldviews of the Powhatan and the English could scarcely have been more dissimilar. The Powhatan people saw the land, the flora and fauna, the people, and those who might be called Tsenacomoco's spiritual inhabitants (especially gods and deceased ancestors) as a unified, inseparable entity, each aspect of which was equally “real.” The English worldview held that human beings were a special creation separate from nature, and nature existed to be conquered and put into man's service.

Collisions and misunderstandings between the newcomers and the peoples of the Chesapeake were inevitable. The English assumed that their religious, social, and political lives were essentially correct, and superior to the ways of life of all others. The Indians of America were considered human, but perhaps not as fully human as the English. The explorers admitted that the natives had souls that might be saved through conversion to Christianity, as well as information about the country that might be useful and goods that were worth trading for or taking by force.

Powhatan, the paramount chief of numerous tribes near Jamestown, probably considered the Englishmen nuisances who might nonetheless prove helpful in countering hostile tribes and supplying useful trade goods, assuming that they survived or remained in his territory long enough to serve his purposes. (The Native peoples here, as well as elsewhere along the East Coast, had seen other Europeans come and go.) Initially, Powhatan gave the English newcomers hospitality and attempted to incorporate them into his political domain (polity). His people guided them through the woods and up the rivers and streams. They answered the strangers' questions, drew maps for them in the sand, and gave them feasts. They brought venison and corn to Jamestown and even took some of them into their towns and homes during the winter. Powhatan's careful calculations about the English and—probably—whether to kill them or feed them were made in an environment in which such decisions could affect the perception of his power, shift his alliances with other polities, and literally result in either death or prosperity for his people.

The English traveled throughout the Bay and encountered both conflict and cooperation with various Chesapeake Bay tribes. They established alliances, and in some instances, they disrupted long-established networks of trade and politics through a variety of exploits. Some of the Englishmen who regularly interacted with the native peoples developed a greater understanding of them. Clearly, the English settlers would not have survived without the assistance of the Chesapeake peoples, and Smith would not have accomplished his mission without their aid.

### **Smith's Explorations**

In exploring the Chesapeake Bay, Captain John Smith was following Company instructions to locate a quicker and easier route (a "Northwest Passage") to the riches of the Orient, seek valuable minerals, identify fish and wildlife, study the forests for useful timber, locate good ports, and learn about the native peoples' towns and numbers of warriors.

"There is but one entrance by sea into this country, and that is at the mouth of a very goodly Bay... Within is a country that may have the perogative over the most pleasant places of Europe, Asia, Africa, or America, for large and pleasant navigable rivers... Here are mountains, hills, plaines, alleys, rivers, and brookes all running most pleasantly into a faire Bay compassed but for the mouth with fruitful and delightsome land." -  
*Captain John Smith, Description of Virginia, 1612*

As noted in journal entries and writings, Smith and his men encountered a Chesapeake ecosystem that featured innumerable schools of fish, up to 500,000 acres of submerged grass beds, bountiful wetlands, thick forests, millions of migratory waterfowl, and oyster bars so massive they posed navigational hazards to sailors.

“[The fish were] lying so thicke with their heads above the water, as for the want of nets we attempted to catch them with our frying pan.”  
-Captain John Smith, 1608

Although Smith later wrote extensively about both of his Chesapeake Bay voyages, there are gaps in the narrative that must be filled with calculations and assumptions based on our understanding of tides and wind directions, the places that Smith did or did not record on his map, and the customary sailing procedures of the early seventeenth century. For instance, Smith based some of what appears on his great map on information derived from the native peoples rather than his own observation. Many of the place-names he assigned or learned from the Indians are still in use.

John Smith’s voyages on the Chesapeake Bay had far-reaching consequences. His “discoveries,” recorded in his maps and books, helped to change Company policy toward private landholding and promoted the transformation of the Bay’s environment through extensive farming and the settlers’ exploitation of natural resources. The large-scale emigration from England that followed in Smith’s wake increased the pressure on the native peoples and the Bay itself. Smith’s model for settlement in the Bay region largely became the model for English America from New England to the Carolinas. His maps served settlers and colonial governments until late in the seventeenth century, and the stories of his exploits continue to intrigue Americans today.

A detailed outline of Smith’s 1608 voyage stops and associated Trail resources is in **Appendix D**.

### ***The Bay Today***

Nearly 17 million people live in the Bay region today, compared with 3 million a century ago and perhaps 50,000 in 1607. The human population in the Bay

“The growth in human population over four hundred years has fundamentally changed the landscape, the culture, the environment, and many ecological relationships within that environment.” -Robert Carter

watershed is currently growing by about 130,000 residents annually; the over-all tally is projected to increase to 17.8 million by 2020. The cumulative impact of centuries of population growth and landscape changes has taken its toll.

The Bay and its many tributaries endure an array of assaults from a variety of sources. Natural, uncontrollable influences, such as high temperatures, strong storms and inconsistent freshwater flows from rivers, can impact water quality and aquatic life.

Human-imposed impacts, including pollution and deforestation, also take their toll. Nutrients, sediment, and chemical contaminants that make their way to the Bay decrease water quality and stress aquatic life. Airborne nitrogen that falls onto the land can also add pollution loads to waterways.

“Our mission is to celebrate the unique history and environment of the Chesapeake Bay while highlighting current efforts to restore the Chesapeake’s health and create a lasting legacy for future generations. We hope that the water trail will also stimulate economic development that is compatible with the Chesapeake ecosystem, especially in the form of heritage tourism. It is important that the trail attract people – from both near and far – who want to understand how Captain Smith helped shape the colony that gave rise to our country, and the natural ecosystem that allowed it to flourish.” - *Gilbert M. Grosvenor, founding member of the Friends of the Captain John Smith Chesapeake National Historic Water Trail*

The Bay is known far and wide for its vast fisheries; however, historic over-harvesting, pollution, and disease now threaten many fish and shellfish populations. More than 200 known or possible invasive species exist in the Bay region; many compete with natural flora and fauna with devastating results. And, as in countless other parts of the world, the Chesapeake is experiencing rising sea level and wider extremes in water temperatures than in the past, which may be attributable to climate change.

Despite the many and varied threats, the Bay remains an extraordinary natural, cultural and economic force. At the time of this writing, human history in the Bay region is documented as far back as 12,000 years. Its shores are dotted with historical treasures that speak to the founding of the nation and the development of American character. The Bay’s bounty supports more than 3,600 different species of plants and animals. About one million waterfowl spend their winters in the Bay area while millions more make their way through Bay country every year along the Atlantic Migratory Bird Flyway. The watershed retains 1.7 million acres of wetland habitats crucial to the life cycles of a myriad of plant and animal species. The world-famous Chesapeake blue crab has long been a symbol of the Bay’s bounty; the annual harvest sells for an average of more than \$50 million. The Chesapeake serves as a major international shipping corridor, with some 100 million tons of cargo moving in and out of Bay ports annually.

The National Historic Trail will provide opportunities for residents and visitors to comprehend the essence and immense values of the Chesapeake Bay ecosystem. Perhaps, as modern-day adventurers follow the trail of exploration charted by John Smith, they will come to revere the Bay as did the first inhabitants.

More detailed background information regarding the Chesapeake Bay, Captain John Smith’s voyages, and the Native American societies of the 17<sup>th</sup> century can be found in **Appendix E**.

## SECTION 3: INTERPRETIVE STRATEGY

### *Interpretation – An Overview*

Interpretation is a very specific communication process designed to reveal meanings and relationships of our cultural and natural heritage through first-hand experiences. The most effective interpretation engages and stimulates audience members and promotes deeper understanding and appreciation regarding the feature(s) and/or topic(s) of interest.

In his list of Interpretive Principles, Freeman Tilden states: “Information, as such, is not interpretation. Interpretation is revelation based upon information. The chief aim of interpretation is not instruction, but provocation.” (A complete list of Tilden’s *Interpretive Principles* is available in **Appendix F**.)

Interpretation helps visitors make important connections between their own experiences and beliefs and the stories and resources associated with the Captain John Smith Chesapeake National Historic Trail. By engaging in meaningful experiences along the Trail, visitors can attain new depths of understanding and appreciation for the unique and vast values associated with the Bay that Smith encountered in 1607 and the Bay we know today.

Interpretation is “...meant to change attitudes and behavior, to motivate, to inspire...[and the] ultimate objective is to take the visitor through the process of sensitivity-awareness-understanding-appreciation and finally, commitment.”

-Freeman Tilden

There are myriad ways to convey interpretive concepts, including something as simple as a self-guiding trail leaflet or as complex as a three-day guided river excursion. Interpretive tools include websites, exhibits, maps, audio visual programs, and brochures. Personal services may include guided paddling tours, living history programs, hands-on scientific explorations, lectures and symposiums, guided hikes, bus tours, and more.

“My experience is that the groups of people who seek out interpretation...are...eager for guidance toward the larger aspects of things that lead toward wisdom and toward the consolations that come from a sense of living in a natural world and a historic continuity that ‘make sense.’”

-Freeman Tilden

## ***Overall Interpretive Approach***

The history associated with the Chesapeake Bay region is multi-faceted and broad-sweeping. The story of the Bay's environment involves a meteor plummeting to earth, glacial activity, changing coastlines, fluxes in wildlife populations, and varied natural responses to human influences and impacts on the landscape. The human history of the region encompasses American Indian societies, English exploration and settlement, a plantation economy, slavery, boat-building, water-based trade, war, and the birth of a nation. The topics associated with the Chesapeake seem endless.

In order for the Captain John Smith Chesapeake National Historic Trail to serve as an effective educational tool, its interpretive scope must be well-defined and focused. Participants at interpretive scoping meetings consistently noted that if we attempt to delve into every subject area related to the Chesapeake region our interpretive efforts will become diluted and ineffectual.

The purpose statement for the Trail identifies three core subject areas:

- a) Captain John Smith's exploratory voyages on the Chesapeake Bay and its tributaries in 1607-1609;
- b) American Indian societies and cultures of the seventeenth century;
- c) The natural history of the Bay (both historic and contemporary).

The Trail's purpose and significance form the foundation for the interpretive themes and consequently, the foundation for all Trail-related interpretation. The aim of Trail interpretation is to guide and inspire area residents and visitors toward an understanding that some of what has been lost in the Bay region can be restored, and that everyone has a role to play in conserving and protecting Bay resources.

The overall strategy for Trail interpretation will include an emphasis on comparing the Bay environment and peoples of the 1600's with contemporary Bay waterscapes, landscapes and human populations. The concept of comparing and contrasting two distinct periods in time has powerful interpretive implications. The places where the contrasts are extreme may instill in people a sense of urgency regarding Bay restoration. Those secluded, protected places that reflect the Bay of yesteryear may inspire people to support Bay restoration efforts and conservation of key historic, scenic and natural areas; and may instill in people a sense of hope for the future.

The Trail provides an opportunity for sites to expand and enrich their interpretive offerings by weaving new information into existing stories, by offering similarities and contrasts between different time periods and/or different cultures, and by making vivid connections between people and the environment. It also provides inspiration for communities to create new opportunities for people to see and experience the Bay.

Each individual site, community or provider along the Trail must determine how to best interpret the resources and stories at that specific location. Some sites, particularly historic sites, may welcome the possibilities of richer and more nuanced interpretation that will come from connecting their stories to one or more of the core subjects associated with the Trail.

With this more inclusive approach to interpretation, sites may broaden their programs:

- a) A site that has traditionally focused only on colonial settlement of the Chesapeake may augment its story by comparing colonial lifeways with those of the American Indians in the region.
- b) A site that traditionally interprets a specific period in our nation's history may extend its message to convey the concept that the resources that attracted immigrants to the Chesapeake during that period were the same resources that supported American Indians and lured the first English colonists in 1607, and are likely the same resources that attract and sustain people in the region today.
- c) Sites that tend to focus their interpretation on human history may broaden their interpretive approach to create linkages between human events and the natural history of the Bay.

There are numerous methods for effectively conveying Trail-related stories and messages.

## ***Interpretive Themes***

Interpretive themes capture the essence of the significance of a place. They include the most important stories and represent core messages that every audience should have the opportunity to hear. They foster opportunities to think critically about the complexities and perspectives of the events, stories, and issues associated with a place or region.

The Trail's interpretive themes address the ideas and concepts critical to understanding and appreciating the resources associated with Captain John Smith's explorations on the Chesapeake. The themes, based on the Trail's designated purpose and significance, provide the basis for all interpretive programs and media identified with the Trail.

The following theme statements and supporting concepts align with the core subjects associated with the Trail: a) Smith's exploratory voyages on the Chesapeake in 1607-1609; b) Native American societies and cultures of the seventeenth century; and c) the natural history of the Bay (both historic and contemporary). All Trail-related interpretive efforts, through both personal services and interpretive media, should relate to one or more of the interpretive theme statements.

**Captain John Smith's voyages on the Chesapeake, and his subsequent maps and writings, profoundly impacted world politics and the evolution of our nation by spurring European settlement of the Bay region and the eastern seaboard, influencing colonial affairs for more than a century, disrupting the native peoples' lifeways in the mid-Atlantic, and increasing human influences on the Bay environment.**

- Smith's time on the Chesapeake is a story of adventure and survival, as the Captain, his crew, and the colonists dealt with great hardships.
  - The environment presented challenges – some that proved deadly – to the colonists who were unfamiliar with the region's climate, landscapes, and food sources.
  - Smith's unusual background, as a mercenary soldier and slave, armed him with the unique leadership skills necessary for helping the Jamestown Colony and his crew to survive. His drive, ingenuity, and courage were noteworthy. Smith's efforts to understand native societies and languages, and his ability to forge relationships with some of the Chesapeake Bay tribes were vital to the colonists' survival.
  - Smith's journeys on the Bay and its tributaries were conducted in a small open boat (shallop) that was primitive, even by period standards. He and his crew traveled great distances under sail and by rowing. They overcame harsh weather, illnesses, language barriers, and conflicts with some Chesapeake Bay tribes.
- Smith's explorations on behalf of England and the Virginia Company were profit-driven in nature.
  - The original purposes of Smith's explorations – locating a Northwest Passage to China and uncovering precious metals – were never realized, but he did find abundant natural resources and fertile lands.
  - Smith's failure to find a Northwest Passage turned the explorers' attention back to the Bay and its resources. The Bay region became the English center of economic interest due to its great natural bounty.
- Captain Smith's writings and maps established his significance and spread the news of North America's abundant resources. The documents accurately represented the landscape, waterways and native settlements, and effectively enabled European colonization.
  - Although surveying in the 17th century was primitive by modern standards, the maps Smith produced were highly accurate and facilitated European colonization for decades.

- Smith's spirited accounts and robust descriptions of an edenic landscape with abundant resources inspired European migration.
- Smith's maps and writings helped lay the groundwork for the plantation economy that emerged in the Chesapeake region and eventually spread throughout the American south.

**Substantial and sophisticated societies of native peoples existed in the Chesapeake region centuries before Smith arrived and although their communities were disrupted and some were ultimately displaced by European colonization, many descendant tribes sustain their identities and cultural values in the region today.**

- Before colonization, Chesapeake Bay Indians developed sophisticated societies with governmental systems, political and military alliances, elaborate trade routes, arts and architecture, and deeply held spiritual beliefs.
  - The life-giving abundance of the Chesapeake attracted people to the region thousands of years ago.
  - Chesapeake Bay Indians likely shared the widespread Native American view that human beings are required by their Creator to live with, rather than dominate, the world around them. This belief would have brought their surroundings – waters, land, plants, and animals – to life to a degree that cannot be overestimated. Each tribe had/has its own distinct and complex value system, distinct language, stories, and oral traditions, which were/are heavily influenced by the environment.
  - Several polities throughout the region organized the peoples, including a large polity (with perhaps as many as 32 tribes) under the leadership of paramount chief Powhatan. A vast network of waterways and footpaths enabled Chesapeake Indians to form political, economic, and cultural linkages with other societies in present-day Ohio, the Great Lakes, Canada, and beyond.
- Chesapeake tribes substantially influenced the fate of European explorers and the ensuing colonization of the region.
  - Some native communities and leaders provided knowledge and support that helped sustain Smith, his crew, and the Jamestown colonists. Several tribes interacted with the Europeans for the purposes of trade.
  - Smith's time in the region included both conflict and cooperation between the English and the Chesapeake Bay Indians. Some of Smith's exploits – such as violating agreements and giving false impressions of rival tribes' military power - resulted in changing alliances and enemies among the native peoples. Although Smith's relationships with the tribes were

important and real, much about them has been romanticized into modern myths.

- Chesapeake Bay tribes have often struggled to survive, yet have endeavored to retain and protect their identities.
  - European colonization in the Chesapeake region created conflict that led to the severe disruption of native lifeways, and culminated in displacement and removal of native peoples from their homelands.
  - Chesapeake Bay Indians continue to live in the region, employing diverse strategies for retaining their cultural identities and traditions in an ever-changing natural and social landscape. They are strongly interested in conserving and restoring sites that are historically important to them.

**During the 17th century, Captain Smith encountered a verdant and varied ecosystem in the Chesapeake Bay region and though much has changed during the intervening centuries, there are still places where such beauty and diversity endure, and efforts are underway to conserve and restore aspects of the Bay's integrity.**

- The Chesapeake Bay of the 1600's was intensely robust and fertile; a "veritable Garden of Eden."
  - Chesapeake Indians embraced the region's abundance by harvesting the rich land, marshes and waterways for plants, wood, clay, fish, shellfish, fowl and mammals to use for food, clothing, building materials and other essentials. English explorers described the Bay region as a "fruitful and delightful land" with "fair meadows and goodly tall trees" that left observers "ravished at the first sight thereof."
  - Nearly 95 percent of the Chesapeake drainage was blanketed in a deep, sometimes ancient forest with chestnuts, oaks, hickories, poplars, bald cypress, and other tree species that grew to immense size. Forest-dwelling animals abounded, including deer, elk, raccoons, squirrels, bears, wolves, bobcats, beavers, otters and more; even bison (grass-eaters) were present, though meadows were not plentiful.
  - The marshes and vast meadows of underwater grasses attracted wintering migratory waterfowl – ducks, geese, and swans – in flocks massive enough to "darken the skies." Populations of fish and shellfish were so robust, oyster reefs posed hazards to navigation, and Atlantic sturgeon were numerous enough to be corralled and wrestled to shore by the native peoples.

- Today, the Chesapeake Bay is a nationally-significant natural and economic resource.
  - The Bay is the continent's largest estuary. The varied habitats in the Bay's watershed – open water, rivers and streams, wetlands and forests – support a diverse array of plants and wildlife.
  - The Bay's waters serve as a key source of crabs, oysters, clams and other seafoods for much of the Atlantic seaboard. The Bay serves as an important hub for trade and commerce.
  
- Since the 17th century, the health and natural diversity of the Chesapeake Bay have suffered from the cumulative effects of natural and human impacts.
  - The water's ability to sustain life has diminished primarily due to human causes, resulting in visible and measurable changes. Key species have declined, disrupting the balance in the sensitive estuarine ecosystem, and greatly harming seafood industries and traditional lifestyles and communities dependent upon abundant harvests.
  - Nearly 75 percent of the watershed was deforested by the late 1800s to produce timber and fuel and to make way for agricultural fields. While natural reforestation occurred during the next century, today's deforestation due to urban/suburban development represents a more permanent change.
  
- Although the natural diversity of the Bay has declined, existing natural areas may be preserved and some resources can be restored and protected. The Trail can serve as an important vehicle in this conservation effort.
  - The essence of the 17<sup>th</sup> century Bay is reflected in some stretches of rivers, hidden coves, and protected marshlands and woodlands throughout the region.
  - Agencies, organizations and individuals are working to protect fragile resources, restore vital habitats, and revive declining plant and animal populations. A crucial impetus for Bay restoration is the direct correlation between the health of the Bay and human health and welfare within the Bay region.
  - Watershed residents and visitors are encouraged to become citizen stewards, and to help restore and protect the Bay through both individual and community-wide efforts including private landowner conservation and access-oriented easements; and community advocacy for federal, state and local conservation programs.

- The Captain John Smith Chesapeake National Historic Trail can serve as a vehicle to inspire people to experience, appreciate, conserve and restore the Chesapeake through exploration, recreation, education, and stewardship.

## **SECTION 4: AUDIENCE ANALYSIS**

### ***Potential Trail Users***

The Captain John Smith Chesapeake National Historic Trail will undoubtedly attract an array of audiences. Outdoor recreation enthusiasts, anglers, eco-tourists, heritage tourists, photographers, artists, adventure seekers, educational groups, and international travelers, among others will be drawn to the Trail. While some avid adventurers may attempt to travel the entire length of the nearly 3,000-mile Trail, the majority of visitors will experience it by visiting individual locations or by exploring short Trail segments. Although the Trail is America's first national water trail, it is anticipated that many visitors (if not most) will experience it entirely from land.

Visitors will employ multiple modes of travel and access along the Trail, such as automobile, bus, bicycle, kayak, canoe, sailing craft, and powerboat. Trail users will seek outdoor adventures, moments of serenity, answers to their questions about the complexity of the Bay's environments, opportunities to step back in time and imagine the Bay of 1600, and more. Visitors will approach the Trail with multiple interests and expectations.

Some visitors may be familiar with the Trail and already have the information they need to safely pursue land and water-based experiences on the Bay. Others may hire outfitters or join tours to explore sections of the Trail, or they may take advantage of recreational, interpretive and educational opportunities provided by numerous public agencies and private partners throughout the region, including members of the Chesapeake Bay Gateways and Watertrails Network. "Virtual users" may experience the Trail solely via electronic media.

Most visitors will fall within several broad groups, including families; area residents; Indian tribes; regional, national and international tourists; educators and students; volunteers; donors; and virtual visitors. Many users will also fit into one or more of the following specific categories:

#### ***Outdoor Recreationists***

Land-based: motorists (cars, buses and motorcycles); hikers; joggers; bicyclists; equestrians, etc.

Water-based: paddlers (kayak/canoe); sail boaters (cruising, day, weekend); power boaters (cruising, day, weekend); jet skiers; anglers; etc.

Nature-based: birders and wildlife enthusiasts; hunters; gardeners; eco-tourists; naturalists; geocachers; etc.

### ***Art and Culture Enthusiasts***

Photographers; artists; heritage tourists; regional/cultural theme tourists (e.g. lighthouses, native cultures); authors; etc.

## ***Targeted Audiences***

The most effective interpretive services are those that are tailored for a specific audience. Although the Trail will provide interpretive services to all potential users, a few groups have been identified as important audiences to target, particularly in the early stages of Trail development. Interpretive programming, media and facilities will be shaped to address their interests and needs. Individual Trail partners and providers are encouraged to identify targeted audiences in order to meet site-specific objectives and to respond to local issues.

The Trail audiences targeted for interpretive programming and outreach during the next five years are:

### **Local Citizens**

Although many visitors may come from afar, it is critical to reach residents affiliated with the Trail and the Chesapeake Bay. The Trail provides opportunities to engage citizens in compelling explorations of their own vast “backyard” and, in turn, to develop a deeper appreciation of the diverse natural and cultural resources that abound in the region. People protect and support the things they understand and appreciate.

Key to reaching this particular audience is to “go where the people are” or “meet them where they live.” Trail promotions and messaging should be available at regional events, at area department stores, at schools and libraries, in regional magazines and newspapers, and on local television and radio stations.

### **Educators and Students**

It is critical to enlist educators and educational institutions to reach K-12 students, scouts and other youth group members, as well as college and university students. Educational materials and programs must be aligned with national and/or state standards, and guidance should be available for those states or local jurisdictions where cultural and/or outdoor education standards are limited in scope. Educators should be involved in the development of all facets of educational programming. It is also important to understand the communication hierarchies within particular school districts, and to offer opportunities for educators to accrue continuing education units in conjunction with

teacher training/education programs. (A list of some existing educational resources is available in **Appendix G.**)

### **Virtual Users**

The newest, rapidly burgeoning segment of users may not be physically present at all; such “virtual users” may experience the Trail solely via electronic media. Providing engaging, information-rich online experiences is the key to reaching these users. Websites should feature in-depth interpretive content to educate and excite visitors; interactive elements to help visitors explore the Trail and associated resources; and links to additional information and services. Elements such as maps, downloadable podcasts, still images, video and blogs will enrich online experiences. The ultimate objective is to inspire these users to plan an “on-the-ground” (or water) Trail experience at a site(s) or along a Trail segment.

## ***Other Audience Considerations***

### **Land-based Users**

As mentioned previously, it is likely that many visitors will experience the Trail solely by land. Public access, recreational opportunities, and interpretive materials and programs should be crafted to serve and accommodate land-based users. These experiences should not be viewed as “second tier” opportunities but as prime, high-quality visitor options that enable people to make enriching connections to Bay stories and resources.

### **Multi-cultural Audiences**

It is imperative to welcome and acknowledge ethnic groups and learn about their perceptions, cultural norms and expectations, and languages. <sup>3</sup>In 2005, one in three U.S. residents was a member of a racial or ethnic minority. <sup>4</sup>In 2006, 45% of all children in the U.S. under the age of five were racial or ethnic minorities. Racial and ethnic variations in outdoor recreation is less pronounced at local levels, in highly developed outdoor recreation settings, and in high volume forms of outdoor recreation such as picnicking, sightseeing and walking.

Visitor opportunities, and interpretive materials and programs should align with the needs of ethnic groups whenever appropriate and possible. Strategies may include developing bilingual materials, offering translation services, or adjusting the schedules for particular programs or services. Individual partners and providers will need to conduct site-specific assessments to effectively serve their targeted audiences.

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<sup>3</sup> Cohn and Bahrapur, 2006 citing Census data

<sup>4</sup> Cohn and Bahrapur, 2006 citing Census data

## Urban and Suburban Audiences

<sup>5</sup>More than 80% of the U.S. population lives in urban or suburban areas. <sup>6</sup>Metro residents are more likely to participate in picnicking, viewing and photographing wildlife, swimming in lakes and streams, and day hiking.

## Generational Variations

Generational variations should be considered when planning and developing interpretive programs, media, and visitor services. Pollster John Zogby profiles our nation's varied generations:

<sup>7</sup>“Don't write off the *Private Generation* (born 1926-45). They've got decades of healthy living ahead of them, and they're going to fill those golden years with volunteering, mentoring, and lifelong learning opportunities.

Woodstockers (born 1946-64) will finally get tired of trying to look and act like their children. This is a generation that needs a second act – something with more social utility than an endless obsession with self. Write the script, and they will come.

*Nikes* (born 1965-78) made 'Just Do It' their mantra, but as they age, they're going to bond with their own families as no generation before them has, and they are going to spearhead the search for greater fulfillment that the Secular Spiritualists - those who believe that the American dream is measured in spiritual, not material, fulfillment – have begun.

*First Globals* (born 1979-90) are ready to go anywhere, experience everything, and work and live in exotic places; and they pillage cyberspace for information that will allow them to do all those things. If you can't market successfully to this amazing crew, find another line of work.”

## Universal Accessibility

The National Park Service is committed to providing access to the widest cross section of the public. Relying on regulatory guidance, the NPS works to make facilities, programs, services and employment accessible and usable by all people, including those with disabilities.

To reflect this policy, a high priority will be given to making Trail-related programs, services, facilities and employment opportunities universally accessible. The NPS acknowledges that partner agencies and organizations operate under a variety of legal mandates regarding accessibility, however, all practicable measures to ensure reasonable accessibility will be employed in Trail-related projects. In choosing among methods of providing accessibility, higher priority will be given to methods that offer programs and activities in the most integrated setting appropriate. Special, separate, or alternative facilities, programs, or services will be provided only when existing ones cannot

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<sup>5</sup> Hobbs and Stoops, 2002

<sup>6</sup> Cordell, and others, 2005

<sup>7</sup> Zogby, *The Way We'll Be: The Zogby Report on the Transformation of the American Dream*

reasonably be made accessible. The determination of what is practicable will be made only after consultation with persons with disabilities or their representatives.

Online resources, Federal regulations pertaining to accessibility, an overview of the American with Disabilities Act of 1990 (ADA), and the 2009 Amendments to ADA are available in **Appendix H**.

## ***Visitation Trends***

### **National Trends**

According to a May, 2009 Travel Industry Association of America (TIA) report, travel spending by domestic and international visitors for 2009 is now expected to total \$704.8 billion, an 8.8% decline from 2008 projected spending. Domestic trips are projected to drop 3.3% in 2009 down to 1.9 million with a very modest recovery in 2010 and strengthening in 2011. The greatest forecasted decline in domestic travel is in the business trip, projected to drop 5.8% to 434,000 trips. Leisure trips are forecast to drop 2.5% to 1,467,000 trips. International inbound traffic is now projected to decline 8.9% in 2009 impacted by recent developments in Mexico and the weakened Canadian dollar.

Consumer intentions to take leisure trips during the remainder of 2009 continue to be strong – 65% of adults plan such travel. However, leisure travelers appear to be sticking with their new, frugal travel habits. A large majority of travelers plan to drive more and fly less, cut both the distance and duration of trips, take more day trips or long weekend getaways, and generally spend less on all aspects of travel.

The Energy Information Administration is predicting gasoline prices will be down \$1.60 per gallon from the 2008 summer average.

**Nature-based Tourism Trends** – According to a <sup>8</sup>national survey conducted by USDA Forest Service Southern Research Station (SRS), the number of people participating in outdoor recreation grew by 4.4 percent from 2000 to 2007 (from about 208 million to 217 million). Fifty of the sixty top activities are defined as “nature-based” and include activities such as wildlife viewing or photography, kayaking, hunting, fishing, backpacking, rock climbing and sightseeing. The total number of times per year that respondents participated in nature activities jumped 32 percent during the study period.

A few nature-based outdoor activities saw a substantial rise in the number of participants between 2000 and 2007: kayaking (up 63.1 percent); viewing or photographing other wildlife (up 21.3 percent); viewing or photographing birds (up 19.3 percent); viewing or

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<sup>8</sup> H. Ken Cordell, article: *The Latest Trends in Nature-based Outdoor Recreation*, Forest History Today magazine, Spring, 2008 (<http://www.srs.fs.usda.gov/news/341>)

photographing natural scenery (up 14.1 percent); visiting nature centers (up 5 percent), and sightseeing (up 4.1 percent).

National Geographic Traveler and the Travel Industry Association of America took this increased interest in nature based tourism a step further in a study of traveler behavior. Today, more than 154 million American adults can be described as travelers. Most are city-dwellers; 70% are Baby Boomers or older. The NGT/TIA study defined geotourism. An outgrowth of nature based or eco-tourism, geotourism encompasses both cultural and environmental concerns regarding travel as well as the local impact tourism has on its communities. Geotourists are concerned with preserving a destination's geographic character. They want to visit destinations with authentic historic and archeological sites. They travel to experience people, lifestyles and cultures different from their own.

**National Parks** - The National Park system received nearly 275 million visits in 2008. Direct spending by all visitors within 50 miles of parks totaled \$11.8 billion. For every \$1 spent by a visitor in or near a park it is estimated that another \$ .50 is generated in the community. National Park Service also supports 232,000 jobs in local communities associated with park units.

As of May, 2009, visits to national parks are slightly up (3%) over 2008 visitation for the same period. Year-to-date visitation for 2009 to Washington D.C. parks is up 1.6 million over 2008 (this number includes visitation to the National Mall for President Obama's inauguration). Maryland national parks have seen an increase of 18,589 visits; Virginia national parks have seen an increase of 69,516 visits; and, Pennsylvania National Parks have seen an increase of 98,536 visits.

### **State-wide Trends**

**Maryland** – According to D.K. Shifflet & Associates, Maryland hosted an estimated 27.2 million visitors in 2007, down 3.8 percent from 2006. More than 75 percent of visitors were leisure visitors; the remaining 24 percent were business travelers. Trips were almost evenly split between day-trips (51%), and overnight stays (48.9%).

Maryland visitors spent \$13.6 billion in 2007 (the most recent year for which complete data is available), an increase of 2.9% over 2006 spending. Tourism generated \$1.7 billion in state and local taxes in 2007 while employing 141,000 people with a payroll of \$3.8 billion.

Maryland increased its room supply by 2.9% from 2006 to 2007, twice the national growth and three times the regional growth in room supply. This increase in supply contributed to the fact that the occupancy rate was only 62.7% - down 1.9% from 2006 and 5.8% lower than the region's occupancy rate. Data for the first half of 2008 shows the occupancy rate dropped to 60.1%.

In 2007, 31% of all travelers to Maryland were from within the state compared to 17% from Pennsylvania and 11% from Virginia. Distant secondary markets include Canada, England, Germany and France.

**Delaware** - About 7.8 million visitors traveled to Delaware in 2007, representing a decline of almost 4% from 2006. Forty percent of Delaware visitors spent one or more nights per trip, with an average spending rate of \$826 per party. The average stay for overnight visitors in 2007 was 1.67 nights. Sixty percent of Delaware visitors were day visitors. Approximately 7 million visitors traveled to Delaware to pursue leisure activities. Only 28% percent of Delaware visitors were visiting friends and relatives. The majority (90%) of visitors travel to Delaware by personal vehicle. Dining was the most popular trip activity (36%), followed by shopping (30%), entertainment (27%), gambling (20%), beach/waterfront-related activities (16%), and touring/sightseeing (13%). The primary states of origin for Delaware visitors (other than Delaware; 20%) were Maryland (20%), New Jersey (15.4%), Pennsylvania (13.9%), Virginia (7.7%), and North Carolina (6.4%).

**District of Columbia** - In 2007, Washington, D.C. welcomed 16.2 million visitors, including 1.2 million international visitors, making it the eighth most visited destination for international travelers in the U.S. Sixty-one percent (61%) of domestic visitors traveled to D.C. for leisure. For overnight visitors, the average length of stay is 3.4 nights.

D.C.'s hospitality industry generated an estimated \$5.7 billion in visitor spending on hotels, dining, shopping, transportation and entertainment in 2007. Travel and Tourism supports more than 71,000 jobs and generates \$2.7 billion in wages.

Sixteen states supply 83% of all visitors to the District: New York, Maryland, Virginia, Pennsylvania, California, Florida, Massachusetts, Connecticut, New Jersey, Ohio, North Carolina, Illinois, Michigan, Georgia, Texas, and Colorado.

**Virginia** - Visits to Virginia's state parks in 2008 totaled 6,937,450, down 2.5% compared to 2007. Recreational visits to Virginia's national parks in 2008 totaled 22,146,653, only 215,446 fewer visitors than 2007.

The Virginia Welcome Centers assisted 13,223,064 visitors in 2008, a 58% increase over 2007. Beginning in December of 2008, Virginia closed all Welcome Centers on Tuesdays and Wednesdays. Visitors to Welcome Centers through April, 2009 totaled 1,000,800, a 13% decline from the same period in 2008.

Data from the Virginia Department of Taxation show lodging taxable sales (hotels/motels, campgrounds, bed & breakfasts) totaled \$3.1 billion in 2008. Statewide lodging room demand was down 3.7% through March of 2009 compared to the same period of 2008, according to Smith Travel Research, Inc. Room rates have increased by .1% to \$98.70 through March 2009. Occupancy rates, which reflect changes in both the

supply and demand for rooms, averaged 48.3% through March 2009, down 7.2% from the same period in 2008.

### **Individual Gateway Sites**

Data from a sampling of Gateways depicts a fairly steady decline in visitation at state parks, although Sandy Point State Park (Annapolis, MD) is seeing an upward trend thus far in 2009. A few museums experienced substantial increases in visitation during the past year or more.

***Calvert Marine Museum, Solomons, MD*** – Overall visitation dropped significantly between 2004 (63,158) and 2005 (58,122). Visitation climbed upward and held steady in 2006 (62,129) and 2007 (62,857), and rose significantly in 2008 (72,222).

***Chesapeake Bay Marine Museum, St. Michaels, MD*** – Overall visitation dropped substantially between 2005 (62,465) and 2006 (58,982). Visitation climbed in 2007 (61,053) and decreased in 2008 (52,744).

***Elk Neck State Park, North East, MD*** – Overall visitation rose significantly between 2004 (561,451) and 2005 (666,009). Visitation steadily declined thereafter: 2006 (411,154), 2007 (305,662), 2008 (269,695). Monthly totals in early 2009 (January – March) are generally consistent with the same time-frame in 2008.

***Sandy Point State Park, Annapolis, MD*** – Overall visitation peaked in 2006 (822,108), dropped in 2007 (784,793) and decreased substantially in 2008 (710,867). The trend to date in 2009 (January – March) is upward from 2008.

***Trap Pond State Park, Laurel, DE*** – Overall visitation peaked in FY2005 (179,503) and dropped substantially in FY2006 (161,096). Visitation spiraled downward in FY2007 (87,698) and FY2008 (84,568). [Fiscal year: July 1 – June 30]

***Virginia Living Museum, Newport News, VA*** – Overall visitation peaked in FY2006 (163,631), dropped in FY2007 (140,075), and climbed upward in FY2008 (157,220). The trend to date in FY2009 is upward from FY 2008. [Fiscal year: July 1 – June 30]

More complete data for the above-mentioned Gateway sites are in **Appendix I**.

## **SECTION 5: POTENTIAL VISITOR EXPERIENCES**

### ***Visitor Experience Objectives***

Visitor experience objectives describe opportunities that will enable people to fully enjoy, understand and appreciate the diverse resources associated with the Trail. The objectives

support the overarching goal to inspire an ethic of stewardship among Trail users, and relate to the Trail's significance, interpretive themes, and targeted audiences.

Visitor experience objectives define desired end results, not the means for attaining those results. Specific strategies and methods for reaching these objectives will be identified in the Taking Action section of the plan.

The following visitor experience objectives are derived from the interpretive scoping meetings held throughout the Chesapeake region in 2007-2008 and through additional consultation. While most objectives are applicable to multiple categories of potential trail users, some pertain to particular targeted audiences.

Trail users (watershed residents and visitors) will have opportunities to:

### ***Trail Orientation***

- Understand the diverse nature and extensiveness of the Chesapeake Bay region and the Trail.
- Acknowledge that the Trail traces the routes of Captain John Smith's 1607-1609 exploratory voyages in the Bay and its tributaries.
- Understand the purpose of the Trail, how the Trail is managed, and who the various partners are.
- Understand that the Trail consists of both land and water sites and routes that are accessible via a variety of transportation modes, including: motor boating, sailing, paddling, car or bus touring, biking, hiking, and more.
- Understand that the Trail is evolving and learn about new opportunities that become available as the Trail develops and grows.
- Be motivated to visit Trail segments and sites and embark on their own journey of discovery through self-guided and/or guided experiences.

### ***Trip Planning***

- Understand that coordinated information services are available to facilitate easy trip planning for land and/or water excursions.
- Be motivated to incorporate Trail-related interpretive programs, special events and other activities into their travel plans.

### ***Touring***

- Feel an immediate sense of welcoming and belonging.
- Safely and easily explore Trail segments and/or sites.

- Be motivated to experience the Bay and the Trail in new ways (by getting on the water, veering off traditional travel routes, getting out of their cars, etc.).
- Gain exposure to varied landscapes and waterways, migratory and resident wildlife, cultural features and enclaves, and the diverse communities of the Bay region.
- Visit areas that reflect the Bay landscape of the early 17<sup>th</sup> century.
- Seek personal renewal and growth through a variety of experiences.
- Be motivated to practice low-impact travel ethics.
- Be motivated to extend their visit and/or return to the Trail again and again.

### ***Interpretation***

- Understand that the Chesapeake Bay is a nationally significant resource.
- Appreciate the Bay's history, features and values.
- Appreciate the magnitude of Smith's explorations in the Chesapeake region in 1607-1609.
- Understand how incredibly abundant and diverse the Bay's natural resources were in the early 17<sup>th</sup> century.
- Understand how Smith's writings and his remarkably accurate map of the Bay influenced immigration and colonial settlement in the region, which impacted the native peoples and the landscape of the Chesapeake.
- Appreciate the long history, extensiveness and sophistication of the societies and cultures of the Chesapeake Indians prior to contact with the English.
- Understand how the American Indians aided in the survival and eventual settlement of the English in the Chesapeake region.
- Acknowledge the multicultural diversity of the region's human history.
- Be provoked to further explore and understand the Bay's cultural and natural heritage and values.
- Develop intellectual and spiritual connections to the places and stories associated with the Trail.
- Acknowledge that Chesapeake Bay Indians continue to live in the region today.
- Acknowledge that the Bay's natural resources have diminished over time.
- Understand how conservation is achieved in the Bay watershed.
- Learn how to engage in Bay stewardship activities.

### *Education*

- Understand that the Trail provides an array of educational resources and opportunities.
- Be motivated to incorporate Trail resources and themes (including stewardship) into their educational activities.
- Be provoked to learn more about the Bay's cultural and natural heritage and values.

### *Stewardship*

- Understand the need for Bay restoration and the associated challenges.
- Appreciate the link between the health of the Bay and human health and welfare.
- Feel inspired and empowered to protect and conserve Bay resources.
- Be motivated to actively engage in Bay conservation and restoration efforts through individual and/or organized activities.

### *Visitor Experience Scenarios*

One of the goals of this interpretive plan is to outline future possibilities for the Captain John Smith Chesapeake National Historic Trail. The Trail is intended to provide residents and visitors access to Bay resources; orientation and interpretation; enriching hands-on experiences; and opportunities to engage in conservation stewardship. Though some of the Trail-related experiences will occur on the water, it is likely that the majority of visitors will become familiar with Trail resources and stories through land-based experiences and interpretation.

The following scenarios describe a few visitor opportunities the Trail may already provide or may offer in the future. The common objectives for all of these visitor experience scenarios is to connect visitors with special places, people, and stories that will touch their hearts, stretch their perceptions, and ultimately make them better stewards of the Bay.

#### **Kayaking the Chickahominy River**

A young couple is visiting the Williamsburg, Virginia area taking in the history and the local ambience. They are also looking for an outdoor experience. Their hotel concierge tells them about the popular day trips on the Captain John Smith Chesapeake National Historic Trail. Several outfitters offer both tours and rentals on the James and the Chickahominy rivers, and Powhatan Creek. The couple opts for a day-trip on the

Chickahominy, and the concierge arranges for an outfitter to pick them up the next morning.

The outfitter picks up the couple and a few other hotel guests in a van and takes them to a local market to allow them to purchase food, water and other light supplies. Then they head to the Chickahominy Waterfront Park where they find a trailer rack of kayaks and safety gear. The outfitter provides instruction for a safe outing, information about the cultural and natural history of the local area, and the importance of Bay stewardship. As day-trippers, the couple has the opportunity to learn some natural history of the Chesapeake by traveling one of its tributaries with a knowledgeable guide, or by exploring on their own with a brochure featuring a very clear map with route options, and information about the Chickahominy and Paspahegh tribes, Smith's explorations, and the flora and fauna of the area.

The couple chooses to explore on their own, using the route map. After learning a little about kayaking safety and the particulars of navigating the currents on the Chickahominy, they set out. They are pleased to see that the color-coded routes on the map have corresponding markers on the water and that there is no question as to where landings are located – everything is marked with the clearly identifiable Trail logo. One nice surprise is the presence of a few interpretive panels that depict the Chickahominy as it was prior to colonial times and some of the people who have come and gone since.

They complete their loop in about four hours at a leisurely pace with some brief stops. They never felt confused about the route. They were well-equipped and did not have any conflicts with the power boats that were also putting in at the Waterfront Park. They fulfilled their desire to have an outdoor experience, but they came away with much more than that; they now have a new-found appreciation for the rich history of the area, and the natural landscape of the Chesapeake Bay.

### **A Visit to a Multi-agency Trail Information Center**

A couple has been thinking of visiting the Chesapeake Bay region. They know something about the area, but they want to learn more. While coming home from a family visit they pull off the interstate at one of several Captain John Smith Chesapeake Information Centers. They are looking for information on day trips and longer vacations. They find this information—and much more!

The couple learns that the center—planned and operated by federal, state and local governmental agencies with contributions from private sites and associations—provides one-stop shopping for planning trips to the Bay Country. The goal of the center is to expand visitors' knowledge of recreational and interpretive opportunities and enhance their appreciation of the Bay.

The couple splits off in different directions to explore the media; not just because there is a lot to see, but because the center is designed so people can chose what they would like

to experience and how they would like to receive information. One person scans the exhibits and is captivated by the beautiful photographs of the land, water and wildlife. The exhibits are organized into geographical areas based on Captain John Smith's voyages. Each area's history, cultures and natural resources are represented. The visitor may watch short videos on a variety of Bay topics—American Indians, Smith's voyages, wildlife and natural areas, historic sites, boating, the lives of the watermen, and more. Each video depicts recommended places to explore and related visitor opportunities.

The other person is drawn to a computer. The computer is programmed to show brief video clips and provide access to interactive information. The program is tiered so a user can select types of experiences and varying levels of information. The visitor also has the option to acquire a printout. As with the exhibits and videos, the computer program is organized around John Smith's voyages and the Trail.

The couple talks to the staff interpreter. She answers their questions and makes suggestions. She encourages them to explore the sites and to seek experiences that peak their interests.

The couple leaves the center with a number of brochures and web site addresses to help them plan their adventures. From their brief stop at the information center they have developed a sense of excitement and appreciation for the land and waters of the Chesapeake Bay. They had no idea there were so many treasured places to explore.

### **A Boat Excursion on the Rappahannock**

The Northern Neck of Virginia offers access to some of the wilder sections of the Rappahannock River, with areas some believe to be most reminiscent of the landscapes of 1607. For that reason, an excursion on the Rappahannock draws visitors who want to break away from developed sites, to be steeped in a more natural setting, and to experience the area as Captain John Smith might have experienced it.

Passengers board a small excursion boat and the operator motors out towards Fones Cliffs. A guide explains the stories behind the place names and describes how people have depended on the river for transportation, sustenance, and protection. Passengers spot herons along the shorelines and in the marshes and bald eagles flying out across the water. The guide identifies schools of catfish with the on-board fish finder, and, occasionally, working watermen are seen plying their craft. The landscape changes as the banks rise into cliffs. The excursion pauses for refreshments, while the tour guide, who is well-versed in the stories of Smith's expeditions, colorfully recounts the story of the ambush at Fones Cliffs. People gain an appreciation not only for the stories, but also for the landscape itself, which, in that section of the river seems hardly changed from the landscape Smith described four centuries ago.

On the return trip, the tour vessel pulls alongside a fishing boat. The watermen are expecting the tour and have a few tools of the trade laid out for the passengers to see. The

watermen haul in their net, describe the catch, and muse upon the prospects of future catches and their direct relationship to the health of the Bay and its tributaries.

### **A Visit to Baltimore's Inner Harbor**

After parking in one of the many nearby area garages, visitors arrive at the Baltimore Inner Harbor's promenade, a lively and colorful place with restaurants, shops, and museums, and views of historic ships and tour boats. At the Baltimore Visitor Center at the end of the promenade closest to Federal Hill, a family finds information regarding the diverse historic walks available to them within walking distance. The family also learns that they can take Water Taxis from many points between the Visitor Center and Fells Point at the opposite end of the promenade. One kiosk they encounter identifies this as an area visited by Captain John Smith on his famous journey through the region. It is hard to imagine the wilderness that was here before today's glass and metal buildings, but the family views images that show the wetlands, flowing creeks and woodlands that once thrived here. They also learn the names of the tribes who traveled through this area, and begin to understand that this was a place of abundance, with fish, blue crabs and oysters; immense flocks of ducks and herds of browsing deer. The evocative connections to the Bay inspire them, so they decide to spend the day by taking the Water Taxi to Fells Point and walking back along the promenade - an experience featuring many optional stops along the way.

The family joins several other families who are waiting for the taxi at the stop below the towering *U.S.S. Constellation*. They join a group gathered around an interpretive panel that tells more about the area as it was before Baltimore. They see that even on a short taxi ride along the downtown waterfront, they will be tracing a segment of the Captain John Smith Chesapeake National Historic Trail. When they enter the taxi, they are delighted to find a guide on board who can bring Smith's journeys to life and describe sites along the way, including Chesapeake Bay Gateways, such as the National Aquarium, the Seven Foot Knoll Lighthouse, the Frederick Douglass-Isaac Myers Maritime Park and Fells Point Historic District. The guide gives them brochures to take along their walk, which - along with the interpretive kiosks along the promenade - help them appreciate the area's early heritage of American Indians, the Bay's previous natural abundance, and Smith's pivotal journey - a journey that led to the intriguing history that built the Baltimore they see today.

### **American Indian Living History**

A family of four is traveling by car on an Eastern Shore vacation, which has included oceanside beaches, some historic sites, and a national wildlife refuge. At the refuge and at nearby towns, they learned through signage and brochures that they are traveling along the Captain John Smith Chesapeake National Historic Trail. Now they are on their way to an experience they learned about in one of the brochures, an experience unlike any other they have ever had - a living history experience with a Native American tribe.

They arrive at the tribe's cultural center, where exhibits and interpreters who are members of the tribe give them a sense of how the Bay has changed and how the tribe's people have lived over the centuries. Traveling back through time, the family sees how some fishing techniques have remained relatively unchanged, except for the materials associated with fishing gear; they learn how some customs rooted in time hundreds of years ago have endured or have been revived; and they understand the sobering truth about how and why many customs have changed or have been lost. As the family moves through the cultural center and listens to their guide, they begin to gain an appreciation of what it means to be from a place, not for a few years, a few decades or even a couple of centuries, but for *thousands* of years.

Then the guide leads the family to the heart of the experience – outside to a re-created 17<sup>th</sup> century Indian town with traditional houses. On that day, there happens to be a new house being built, and the tribe members welcome the family. One of the builders enlists the family members to help with stripping bark from the timber poles before the poles are used in the structure. The family learns how to make cordage for bundling thatch, and they learn various ways to make fire. Most importantly, they learn how every member of their family would work in the town and for the tribe. As they help to build a house and start the cooking fire, they begin to understand and appreciate the interdependence people experienced in such communities. They are prompted to wonder how they would view Captain John Smith and his crew – a boatload of strangers from across the sea.

Hours have passed quickly, and the family is hungry. They treat themselves to fish cooked over an open fire, fresh oysters and corn. At night they stay in lodging available near the cultural center, and before they retire they join a campfire program where an elder of the tribe talks about tradition and change, and about what it means to learn and value the history of a place and the people who live there. Tomorrow a canoe trip is scheduled, led by a younger member of the tribe...

### **Visiting First Landing State Park**

A couple living near Richmond want to take their visiting grandchildren on an outing. Their grandchildren are a nine-year-old boy, a seven-year-old girl, and a five-year-old boy. These are active children so the grandparents will need a variety of activities to entertain the kids. The grandfather checks the Internet for the Virginia state parks. He finds First Landing State Park on the Chesapeake Bay near Norfolk. This park fits the bill since it offers a swimming beach, hiking trails, picnicking sites and ranger-led nature and history programs. The park has places to play and places to rest. Both will be needed.

At the park entrance they receive a brochure with a park map and activity sites. The brochure has a "Do You Know?" section that explains the park is named First Landing because this is the site where the Jamestown colonists first landed in 1607. The grandparents are surprised to learn this. The text encourages them to learn more about

this story at the park's Trail Center and at the Chesapeake Bay Center, an environmental education facility.

But first the kids are anxious to get to the beach. The grandparents watch the kids as they swim and play in the sand. After a while, they all head to the picnic area for lunch. On the way they stop at three outdoor panels overlooking the beach. One describes the native peoples who lived in the area and the natural environment in which they lived. Another explains the arrival of the Virginia settlers. The third panel tells the story of John Smith's voyages of exploration on the Chesapeake. The grandparents are excited to learn this; the kids are thinking of lunch.

After their picnic the grandparents decide some time out of the sun would be a good idea. They visit the Chesapeake Bay Center. The kids find multi-age-level interactive exhibits that encourage them to take the roles of an Indian, an English settler and Captain John Smith. The kids have fun and learn that years ago the people who lived here had exciting and challenging experiences. A staff interpreter helps the kids navigate the exhibits.

The grandfather and the older boy and girl accept an interpreter's invitation to take a short guided walk. She shows the group the way the environment has changed and how it has remained the same since 1607. She ends the walk by suggesting ways they can help conserve and preserve the Chesapeake Bay.

With the kids sleeping in the car, the grandparents drive back to Richmond. They have brochures describing other places to visit where they will learn more about the stories they heard today.

### **Environmental Learning on the Bay**

A science program developed for students, called "BayLab," has become one of the area's most popular activities. Two new vessels have recently been added to the "fleet." Twice a day students board this laboratory boat to troll the Bay. They take water measurements, analyze data, and draw in samples. Scientific experiments are far from dull on this vessel. The program covers water quality, meteorology, navigation, and marine biology, although each excursion may focus on just one of these areas. Instructors are graduate students from the one of the many universities in the five-state region.

Some of the students volunteer to put on fishermen's attire to help spread and haul the net. Others remain dry inside the cabin. The haul on this trip includes half a dozen skates, a few blue crabs, and a rare sturgeon. Some students examine the specimens and learn about each creature's role in the ecosystem before they return the sea life to the water. Meanwhile another group of students drops thermometers and records water temperatures at various depths. They also test salinity and clarity of the water.

When all of the experiments are completed and the results recorded, the boat motors over to one of the Chesapeake Bay Interpretive Buoys where the students learn about the

interconnected systems used for monitoring the Bay. The tour contacts the buoy via a cell phone, compares the live data they receive from the buoy to the data they just collected, and learns the importance of the exercise from their tour guide. As the boat heads back to shore, the guide explains how the data and samples they collected are really a slice of Chesapeake history – the history of human settlement and environmental change that began with American Indians thousands of years ago, but accelerated dramatically once Smith explored and mapped the Bay.

### **A Bus Tour of Heritage Sites**

Two senior couples sign up for an all-day bus tour with the American Heritage Bus Company operating out of Washington, D.C. The cost is reasonable and includes entrance fees, a light breakfast, and a box lunch. From a variety of offerings—a Civil War tour, a Pennsylvania Amish country tour, and a day and night in Atlantic City—they chose the America’s Beginnings tour. They meet the bus at a parking lot near the Capital Beltway at 8:00AM.

The bus takes them through the countryside and small towns of Southern Maryland. At 9:00AM they arrive at the St. Clements Island Potomac River Museum. A museum interpreter encourages them to enjoy the museum and the interpretive walks outside. She tells them that the European history of this area began with Captain John Smith’s Chesapeake voyages and that St. Clements Island is the site where the first colonists in Maryland came ashore in 1634. The four visitors learn more about these stories from the exhibits and outdoor panels. The men are especially interested in the exhibits describing the history of the Potomac River and the lives of the watermen who lived here. They decide to take the optional water taxi trip to St. Clements Island State Park, the actual site of the landing. It is a beautiful day and it is a special bonus to be out on the water.

At 10:30AM they board the bus for the short trip to Historic St. Mary’s City. At this 800-acre museum to Maryland’s first capital they are immersed in the early colonial period with costumed interpreters and recreated 17<sup>th</sup> century buildings. They experience the culture of the Yaocomico Indians, observe the hard work of a colonial tobacco farmer and discover how historians and archeologists learn about the past. Here again, as at St. Clements Island, they realize how important the Potomac River and the Chesapeake Bay were as transportation routes for colonial settlers. There is a lot to see here. While they eat their box lunches they vow to return with their grandchildren.

About 12:45PM the bus departs and heads toward Leonardtown where the passengers enjoy a brief stop to explore and do a little shopping. At 2:00PM they reboard the bus for their last stop. At Sotterley Plantation a docent leads a guided tour of the original 18<sup>th</sup> century tidewater plantation house and the grounds overlooking the Patuxent River. They learn how Maryland plantation owners and enslaved African Americans lived on this colonial plantation. Once more they see authentic glimpses of a time past that has affected the way we live today. They understand how people settled beside the rivers and

Chesapeake Bay. They have a renewed appreciation for America's colonial history. The bus leaves at 4:00PM for the trip back to Washington.

### **Helping to Restore a Wetland**

A young, twenty-something cyclist, hiker and kayaker lives in Baltimore and is getting his start in the corporate world. He loves the outdoors, but between his work, outdoor activities and social life he hasn't had time for conservation activities. While surfing kayaking sites on the Internet he sees a link to a conservation project at the Blackwater National Wildlife Refuge. He's intrigued because he has cycled and kayaked at Blackwater Refuge and has found it to be a stunningly beautiful place.

The web link takes him to a site where the National Aquarium of Baltimore is calling for volunteers to help restore a wetland at Blackwater Refuge by planting native marsh grasses. From his trips to Blackwater Refuge he knows that wetlands have been destroyed by erosion, sea level rise, and invasive species such as the nutria. Until learning about this project he hadn't known there was much that could be done about it. He is intrigued by the opportunity to help. He emails his response to register as a volunteer.

By the time his day to volunteer arrives he has talked a friend into joining him. They leave Baltimore early and arrive by 8:00AM at the Blackwater Refuge visitor center. Other volunteers range from seniors to kids, 14 and up, all dressed for a day in the mud. Members of the Friends of Blackwater Refuge thank them for coming, give them water bottles, and review the task for the day.

It is a hard day and the work is dirty, but fun. The weather is not too hot and the mosquitoes have abated. The Friends and the Aquarium have provided sunscreen, bug spray and box lunches. As the volunteers work to plant the marsh grasses they are helped and instructed by staff and volunteers who explain the importance of wetland restoration to the health of Blackwater Refuge and the Chesapeake Bay. By the end of the afternoon the friends are tired, but not too tired for a quick bike ride before the refuge closes.

It has been a fine day. The friends feel good about their contributions to the Blackwater National Wildlife Refuge and they've learned a lot about Bay ecology. They will look for chances to do this again. They also have been given hope. The news about the Bay is not all grim. They've learned that conditions can be improved and that there are opportunities to help. Now that the two friends are registered as volunteers, they will be contacted regularly with environmental news and other volunteer opportunities. They will also receive a CD-ROM on Chesapeake Bay watershed ecology produced by the Aquarium. Their "conservation link" to the Bay has been established.

## Touring a Trail Discovery Center

On their way to the beach a family of five—two adults and three children—sees brown highway signs for the Captain John Smith Nanticoke Discovery Center. Everyone is in a hurry to reach the beach, but later the father checks out the site on the internet. The family decides to make a day trip to the Discovery Center on a fall weekend.

In the Discovery Center the family enters a time capsule of the year 1608 when Captain John Smith and his men explored the Chesapeake Bay and the Nanticoke River and met the American Indians who lived in towns along the river.

Everyone's highlight is the Nanticoke Discoveries Maze. In this immersive role-play adventure each person experiences the Bay environment as Smith found it—and as the American Indians in the area had known it years before. The maze appeals to each person's process of discovery. The seven-year-old boy finds exhibits that encourage him to touch, smell, crawl and listen. The ten-year-old girl explores the roles of an Indian who encountered these strange explorers and a brave, but nervous, English crewman. The seventeen-year-old boy uses an interactive computer to examine concepts such as political conquest, cultural conflict, resource exploitation and environmental conservation—all presented with real and understandable examples related to Smith and the Bay's history. The mother is enthralled by the richness and complexity of the Indian cultures. She is struck that the meeting of these indigenous people with Smith and his men was the beginning of events that changed their way of life forever. The father follows Smith's routes electronically to trace the geography of the Chesapeake Bay. He compares Smith's map with the maps of today and is amazed by the accuracy of Smith's map. He vows to read more about this self-made adventurer. Both adults are surprised by the number of towns and people that Smith found on his voyages. They learn that the Chesapeake Bay Smith encountered was not uninhabited wilderness.

The family takes a lot in. They learn of other great sites to visit along the Captain John Smith Chesapeake National Historic Trail. They leave the Discovery Center with new perceptions of the Chesapeake Bay. In the afternoon they stroll through the town, and take a short canoe ride on the river. They leave knowing there is much more here than the road to the beach.

## **SECTION 6: BUILDING A SUPPORT BASE**

To create a successful interpretive program for the Trail, it is essential to involve a broad range of stakeholders to build a solid base of support. The NPS has already formed numerous Trail partnerships. These varied entities provide critical information and perspectives to help develop key interpretive storylines and approaches, a range of visitor opportunities, and effective promotional strategies. Trail outreach and expansion efforts will continue to focus on involving a myriad of Trail partners and supporters, including

Gateways, land management agencies, conservation organizations, tribes, businesses, decision-makers and media representatives. These groups will help to plan, manage, support and/or promote a holistic and broad-reaching “product” – the Captain John Smith Chesapeake National Historic Trail.

### ***Trail Partners and Providers (existing and potential)***

Collaboration is central to managing any national historic trail. The lead agency or group of lead organizations represents the core of the management mechanism, but partners - the “spokes of the wheel”- determine the success or failure of the operation. For the Captain John Smith Chesapeake National Historic Trail, the intent is to develop and/or strengthen linkages between existing and potential sites and visitor experiences along the Trail to create a continuum of opportunities. Parks, wildlife refuges, museums, historic waterfronts, marinas, land and water trail segments, and other points along the Trail will connect visitors with the region’s landscapes and waterscapes, as well as the area’s human history.

Partnerships will be forged and/or enhanced with traditional partners, as found within the Gateways and Watertrails Network. In addition, alliances with non-traditional partners, such as marina operators, outfitters, and bed & breakfast owners will be initiated in order to provide a full spectrum of visitor experiences and services. Partners will be asked to participate in every facet of Trail development, promotion and management in order to create a successful, efficient and sustainable unit of the National Trail System.

Contact information for additional existing and potential partners is available in **Appendix J**.

Trail partners will have opportunities to:

- Understand that the Trail provides opportunities to promote Bay values, facilitate enjoyment and appreciation of Bay resources, and enhance Bay stewardship.
- Understand that the shared values of natural beauty, outdoor recreation, and cultural pride are the basis for productive relationships among Trail partners.
- Acknowledge that the Trail can serve as a vital networking hub for partners, with established systems for sharing information and resources.
- Be motivated to actively participate in promoting the Trail, developing new and enhanced Trail access, providing quality visitor services, and managing Trail assets.
- Be motivated to enhance their connections to Bay resources and seek opportunities to support and engage in Bay conservation and restoration.

## **Decision-makers**

To successfully promote, develop and manage the Trail, it is critical to secure the involvement of community, business and agency leaders. Ongoing collaboration with leaders and policy-makers will aid in forging important relationships and obtaining resources necessary for long-term growth and management of the Trail.

## **Partners Identified in Trail Legislation**

Two partnership entities are linked to the Trail by law. The enabling legislation for the Captain John Smith Chesapeake National Historic Trail specifies that the Trail shall be administered “in coordination with” the Chesapeake Bay Gateways and Watertrails Network and the Chesapeake Bay Program.

***Chesapeake Bay Gateways and Watertrails Network (CBGN)*** – As mentioned previously, CBGN provides a framework for development of the National Historic Trail with its array of Bay watershed parks, wildlife refuges, historic sites, museums, educational institutions, existing water trails and other assets. Trail-specific Memorandums of Understanding are in process with nearly one hundred existing Gateways. A preliminary list of Gateways associated with the Trail is in **Appendix K**.

***Chesapeake Bay Program*** - The Chesapeake Bay Program is a regional partnership that has coordinated and conducted the restoration of the Chesapeake Bay since 1983. Partners include the U.S. Environmental Protection Agency, representing the federal government; the U.S. Department of Agriculture; the states of Delaware, Maryland, New York, Pennsylvania, Virginia and West Virginia; the District of Columbia; the Chesapeake Bay Commission, a tri-state legislative body; and advisory groups of citizens, scientists and local government officials. The National Park Service’s Chesapeake Bay Office is part of the Chesapeake Bay Program, providing leadership in education and interpretation to foster citizen stewardship of the Bay.

## **Federal Agencies**

***U. S. Environmental Protection Agency (EPA)*** – One of the original signers to the 1983 Chesapeake Bay Agreement, the EPA is the primary representative for the federal government for the Chesapeake Bay Program. The EPA coordinates federal, state, and local Bay restoration efforts and authorities throughout the watershed and provides environmental planning and financial assistance, implements and coordinates science, modeling, data collection, assessment, monitoring, and outreach, and develops and makes available information pertaining to the environmental quality and living resources of the Chesapeake Bay ecosystem. The EPA and the NPS have a long-standing Memorandum of Understanding that commits both agencies to collaborate on Chesapeake Bay restoration and conservation efforts.

***National Oceanic and Atmospheric Administration (NOAA)*** – The NOAA Chesapeake Bay Office, part of the Chesapeake Bay Program, focuses NOAA’s capabilities in science, service, and stewardship to protect and restore the Chesapeake. Along with several partners, NOAA launched the Chesapeake Bay Interpretive Buoy System (CBIBS) in 2007. Using state-of-the-art interactive buoys, CBIBS provides real-time data on wind, weather and water quality, along with historical narratives and other information. More detailed information regarding CBIBS is in **Appendix L**.

A Memorandum of Understanding between NOAA and the NPS was signed in 2008 that commits both agencies to work closely together on further developing and managing the Captain John Smith Chesapeake National Historic Trail, CBIBS, and the Chesapeake Bay Gateways and Watertrails Network.

***U.S. Fish and Wildlife Service (FWS)*** - Sixteen national wildlife refuges are located along the route of the Captain John Smith Chesapeake National Historic Trail. They are part of the National Wildlife Refuge System managed by the FWS. Refuges are public lands and waters set aside to conserve America’s fish, wildlife, and plants. Many of the refuges in proximity to the Trail are already part of the Chesapeake Bay Gateways and Watertrails Network. They are likely places to gain access to the Trail and see wildlife habitats that retain the character of the Chesapeake landscape known to Captain John Smith.

In 2008, the NPS and the FWS initiated development of a Concept Plan to describe opportunities for national wildlife refuges to engage with the Captain John Smith Chesapeake National Historic Trail. The mission of the National Wildlife Refuge System aligns with Trail goals. There are opportunities to provide public access to the Trail and Trail-related interpretation on some national wildlife refuges, and the potential to bolster resource protection on refuges through Trail-related initiatives.

***National Park Service units within the Bay watershed*** – Twelve national park units and three national trails overlap with or are in proximity to the Trail. Colonial National Historic Park and Fort McHenry National Monument and Historic Shrine have been intricately involved in Trail activities. Other parks participated in interpretive scoping meetings. The Trail overlaps with segments of the Potomac Heritage National Scenic Trail, the Star-Spangled Banner National Historic Trail, and the Washington Rochambeau Revolutionary Route National Historic Trail.

## **State Agencies**

The Trail extends into parts of Virginia, Maryland, Delaware, and the District of Columbia. The National Park Service has initiated work with many different agencies and jurisdictions within these states and the District. Departments for natural resources, cultural resources, recreation, education, environment, transportation, and tourism are among the offices that share interest in the Trail’s potential for education, recreation, eco-tourism, heritage tourism and cultural and natural resource conservation.

A sampling of agencies already invested in the Trail initiative include:

***Natural Resources Departments*** – The state departments have been heavily invested in assisting with the Chesapeake Bay Gateways and Watertrails Network for quite some time, and have been assisting with development of the Trail. Just a few of the activities the departments have been engaged in include developing water trails, providing outdoor recreation opportunities for visitors, and assisting the NPS with inventories and gap analyses related to Trail resources and public access.

*Delaware Department of Natural Resources and Environmental Control*

*Maryland Department of Natural Resources*

*Virginia Department of Conservation and Recreation*

***Tourism Offices*** – State tourism offices have provided assistance with the Gateways and Watertrails Network since its inception, and are providing valuable guidance and assistance with Trail planning.

*Delaware Tourism Office*

*Maryland Office of Tourism Development*

*Virginia Tourism Corporation*

*Eastern Shore of Virginia Tourism Commission*

***State Historic Preservation Entities*** – Several state agencies have been involved with the Gateways and Watertrails Network for many years, providing guidance and support. These agencies are serving as active participants and consultants in Trail development.

*Maryland Historical Trust*

*Virginia Department of Historic Resources*

## **Local Government**

Numerous local government entities, including Parks and Recreation Departments, local tourism branches, and others, have been involved with the Gateways and Watertrails Network and have participated in early scoping meetings and planning efforts related to the Trail.

***The District*** – Agencies within Washington, D.C., including D.C. Planning and Development and others, have participated in Trail planning. Efforts thus far have focused on the Potomac and Anacostia river corridors.

***Chesapeake Bay Commission*** – The Chesapeake Bay Commission is a policy leader in restoration of the Chesapeake Bay. As a tri-state legislative assembly representing Maryland, Virginia and Pennsylvania, the Commission's leadership covers a full spectrum of Bay issues: from managing living resources and conserving land, to protecting water quality. The Commission has been deeply rooted in development of both the Gateways and Watertrails Network and the Trail.

## **Chesapeake Bay Indian Tribes and Descendant Communities**

The experiences and stories of the Chesapeake Bay tribes are intricately entwined with many of the resources and storylines associated with the Trail. It is essential to engage contemporary tribal representatives and descendant communities in developing, providing and participating in programs and visitor opportunities along the Trail. All efforts to engage the various tribes and communities of the region should be done with respect and sensitivity. Prerequisites for approaching and working with group representatives and members include an understanding and appreciation of present-day tribal mores (including communication preferences), and inter-tribal relationships. It is also important to know what associations, if any, a particular tribe has with the Trail to date.

The NPS works closely with the Maryland Commission on Indian Affairs and the Virginia Council on Indians. Numerous Chesapeake Bay tribes have consulted on several Gateways and Watertrails Network initiatives and site-specific projects. Tribal representatives have participated in Trail scoping meetings and are invested in Trail planning and development.

Some of the Tribes in the Chesapeake Bay region include:

*Accohannock Indian Tribe, Inc.*

*Cedarville Band of Piscataway Indians, Inc.*

*Nause-Waiwash Band of Indians, Inc.*

*Pocomoke Indians*

*Piscataway-Conoy Confederacy and Subtribes*

*Chickahominy Indian Tribe*

*Mattaponi Indian Tribe*

*Monacan Indian Nation*

*Nansemond Indian Tribe*

*Pamunkey Indian Tribe*

*Rappahannock Tribe*

*Upper Mattaponi Indian Tribe*

*Nanticoke Indian Tribe*

## **Organizations**

The impetus for creating the Captain John Smith Chesapeake National Historic Trail came from organizations and individuals who saw the potential of the Trail to attract new interest in the Chesapeake Bay. These organizations, as well as many others, will help to broaden and sustain the base of support for the Trail.

***Friends of the John Smith Chesapeake Trail*** – The Friends of the John Smith Chesapeake Trail is a regional environmental organization dedicated to conserving treasured landscapes in the Chesapeake and advancing the goals of the Captain John Smith National Historic Trail and other national historic trails in the Chesapeake region. Founded in 2005, the Friends' goals are to conserve Chesapeake landscapes, increase

public access to the Bay, and develop stewardship for the Bay's natural and cultural resources. The Friends successfully led the effort to establish the Captain John Smith National Historic Trail and continues to facilitate the Trail's implementation and development in close cooperation with the NPS.

***Friends of Chesapeake Gateways*** – The Friends of Chesapeake Gateways is a key supporting partner of the Chesapeake Bay Gateways and Watertrails Network and its member Gateways. As a non-profit partner, the Friends supplement the programmatic and financial capacity of Gateways, the Gateways Network, and also the Captain John Smith Chesapeake National Historic Trail. Through a Cooperative Agreement with the NPS, the Friends help achieve interpretive, education, outreach, public relations and stewardship goals of the Network. In particular, the Friends assist with communications and promotions; provide technical assistance to build organizational capacity; assist with the development and implementation of interpretive, educational, public access, and volunteer restoration projects; and coordinate conferences and training workshops for Gateways and Trail partners.

***Chesapeake Bay Foundation (CBF)*** - The Chesapeake Bay Foundation was one of the founding supporters for the Captain John Smith Chesapeake National Historic Trail. CBF is the largest privately funded, non-profit organization dedicated solely to protecting and restoring the Chesapeake Bay. CBF's mission is to restore and sustain the Bay's ecosystem by substantially improving the water quality and productivity of the watershed.

***The Conservation Fund*** – The Conservation Fund played a supporting role in establishing the Captain John Smith Chesapeake National Historic Trail. The Fund is a national environmental organization dedicated to protecting America's most important landscapes and waterways, such as the Chesapeake Bay watershed. Its mission is to promote both sustainable economic development and environmental protection. Through a partnership-driven approach, the Fund works to preserve our nation's outdoor heritage. Since 1985, the Fund and their partners have protected more than 6 million acres of working lands, wild havens, community open space and more.

***National Geographic*** - National Geographic was another early supporter essential to the creation of the Trail. Founded in 1888 to “increase and diffuse geographic knowledge,” National Geographic joined the Captain John Smith Chesapeake National Historic Trail initiative to encourage modern-day exploration and appreciation of the Chesapeake Bay. National Geographic's outstanding publications, interactive website, and educational resources continue to bring alive the many facets of Captain John Smith's explorations for audiences of all ages.

## **Businesses**

A spectrum of commercial services - tour guiding, accommodations, equipment rentals, and food provisions - will support visitor experiences along the Trail. It will be essential to work closely with outfitters; touring guides/tour boat operators; hunting and fishing

guides; watermen; marina owners/operators; hotels, motels, bed & breakfasts; restaurants; and other commercial entities to ensure seamless and well-accommodated visitor experiences. Some commercial enterprises will become partners in developing and/or providing interpretation along the Trail. They may offer innovations that will further Trail goals, such as the services Verizon Wireless provides for the Chesapeake Bay Interpretive Buoy System.

## ***Media***

To promote interest and support for the Trail within the watershed's citizenry, it is critical to align with the region's various media outlets, including television, radio, newspapers (especially small local papers), and magazines. In addition to providing information to the outlets and encouraging coverage of Trail-related events and developments, it is important to create ongoing relationships with reporters, writers and other media representatives to enhance their understanding of the goals and complexity of the Trail.

## **SECTION 7: TAKING ACTION**

### ***The Need for Action***

While the National Park Service develops a Comprehensive Management Plan for the Trail, numerous activities and projects have been initiated to promote the Trail, gather information, enhance existing sites and Trail segments, create new Trail components, strengthen existing partnerships, and create dialogue with potential partners and providers. Some strategies have been identified to "grow" the Trail; they will evolve as new information is gathered and new opportunities arise.

### ***Issues and Opportunities Affecting Interpretation***

Numerous issues, challenges and opportunities will affect the development and implementation of the Trail's interpretive program. The information outlined below provides a context for understanding, planning and implementing the program.

1. ***The Trail's vastness and diversity*** – The Trail traverses 3,000 miles and interconnects with an array of diverse locations. Trail-related stories are numerous and varied. Visitors will experience the Trail in many different land and water contexts. The Trail has the potential to provide a variety of rich and diverse, life-changing experiences.
2. ***The need for cohesiveness*** – The ultimate goal of the Trail is to provide a continuum of quality visitor experiences that will inspire an ethic of stewardship among Trail users. It will be important to maintain a cohesive story, a high

- standard of quality visitor experiences, and some level of Trail identity along the 3,000-mile route.
3. ***User conflicts*** – The Trail serves diverse audiences with specialized needs and expectations. While some visitors seek solitude and connectivity with nature, other users want adventure and excitement. It will be important to provide a range of quality experiences along the Trail and minimize user conflicts as much as possible when planning and implementing interpretive and recreational opportunities.
  4. ***A broad range of partners and providers*** – Trail sites and segments are administered by a range of federal, state, county and municipal agencies, and non-profit groups. Numerous commercial entities provide services along the Trail. Each partner organization and provider operates within the context of their own organizational goals and policies, as well as with those identified with the Trail. It will be vital to properly coordinate the differing policies in order to provide seamless visitor experiences along the Trail. A variety of personnel manage Trail sites and segments; some locations have professional staff, while others are run solely by volunteers. Staff training and networking will be essential elements of the Trail interpretive program.
  5. ***Protection of archeological resources and Native American lands and sacred sites*** – Numerous archeological sites and Native American lands and sacred places are located along the Trail. It is critically important to convey to visitors the sanctity of these sites and the associated artifacts. Relevant regulations and policies must be noted to make visitors aware of prohibitions associated with disturbing or collecting artifacts, and entering protected places. The Trail provides opportunities to sensitize visitors to the methods, benefits and importance of protecting these sites and artifacts, and respecting Native American traditions.
  6. ***Protection of wildlife and sensitive habitats*** – Threatened and endangered plant and animal species and sensitive habitats are found along the Trail. It is critically important to make visitors aware of the fragility of some species and habitats. Relevant regulations and policies must be noted to alert visitors to prohibitions associated with interacting with wildlife and entering protected places. The Trail provides opportunities to convey wildlife conservation messages and engage visitors in conservation and restoration activities.
  7. ***Private property rights*** – Much of the land associated with the Trail is privately owned. It is imperative to safeguard private property and the rights of landowners by conveying clear messages to visitors regarding land ownership and restrictions associated with private property. The Trail provides opportunities to instill in visitors respect for the rights of private landowners, and also opens the door for partnerships involving landowners.
  8. ***Leave No Trace and “going green”*** – The Trail is an excellent forum to demonstrate how people can live in balance with nature and minimize their impacts. The Trail interpretive program can highlight and share the Leave No Trace principles and elements associated with a “green” lifestyle.
  9. ***Global climate change*** – Climate change and rising sea levels have the potential to profoundly affect the Earth’s ecosystems in the next 10 to 50 years. These

changes will affect the natural and cultural resources associated with the Trail. The Trail provides ample opportunities to address this critical issue as it relates to regional and national environmental and cultural resource conservation.

10. ***Children and nature*** – There is growing concern both regionally and nationally regarding young peoples’ detachment from the environment. Parents and educators are concerned that children are spending too much time indoors. Pending federal legislation entitled “No Child Left Inside” calls for monetary incentives for states to develop Environmental Literacy Plans for schools, along with funding to train teachers to conduct outdoor education activities. This legislation would significantly advance and support the Trail’s education and interpretive program.
11. ***May 12, 2009 Executive Order*** – President Barack Obama issued an Executive Order that strengthens the federal efforts to restore the Chesapeake Bay and specifically calls for more public access from federal lands to the Bay and an effort to conserve Chesapeake’s landscapes and ecosystems. The executive order directs federal departments and agencies to work with the Department of the Interior to develop a plan to expand public access to the Bay from federal land; to identify landscapes and ecosystems valued for their historical, cultural, ecological, or scientific worth; and to develop options for conserving these landscapes and ecosystems. The plan is to be coordinated with state and local agencies in the watershed, and the Captain John Smith Chesapeake National Historic Trail, the Chesapeake Bay Gateways and Watertrails Network, and the Star-Spangled Banner National Historic Trail.

### ***Early Implementation Projects***

The matrix below outlines the activities and projects that have been undertaken by the NPS, Gateways and other partners. Each of these projects was initiated to further promote and/or develop the Captain John Smith Chesapeake National Historic Trail.



## **Tools and Guidelines for Implementation**

### **Partnership Agreements**

Partnership agreements ensure that the NPS and its partners work cooperatively to fulfill their roles and achieve the goals and purposes of the Captain John Smith Chesapeake National Historic Trail for the benefit of the public. These recognized partnerships enable the NPS to provide technical and financial assistance to sites and segments of the Trail. Partners and providers managing sites and segments of the Trail will enter into partnership agreements with the NPS before implementing projects identified as products of the Captain John Smith Chesapeake National Historic Trail, and before they may identify themselves as members of the Trail.

A template for existing Chesapeake Bay Gateways and Watertrails Network agreements is in **Appendix N**; a template for Captain John Smith Chesapeake National Historic Trail agreements is in **Appendix O**.

### **Chesapeake Bay Gateways Network Technical and Financial Assistance Program**

The NPS provides technical and financial assistance to member Gateways and connector routes that meet the goals established for the Chesapeake Bay Gateways and Watertrails Network to provide public access to Bay resources, interpretation, and stewardship opportunities. These goals are in accord with the goals of the Captain John Smith Chesapeake National Historic Trail.

Technical assistance is available through workshops, conferences, one-on-one consultations and a series of manuals and guides. (*A Water Trail Toolbox* is in **Appendix P**.)

Financial assistance awards may be used for a variety of projects that support the Trail goals - to help people:

- understand Trail-related resources through stories and places;
- gain access to those places and resources; and
- experience conservation stewardship and be motivated to get involved.

The 2009 Chesapeake Bay Gateways Network Grant Guidelines are in **Appendix Q**.

All currently designated Gateways are eligible to apply for financial assistance. If a partner is not a designated Gateway they are not eligible to apply. Gateways are designated through a nomination process entirely separate from the review of grant proposals. Information about the nomination process is available on the Gateways website at [www.baygateways.net/join.cfm](http://www.baygateways.net/join.cfm).

## **Evaluation**

Measurable goals for success should be articulated for all projects implemented for the National Historic Trail, as should means for measuring the effectiveness of projects in communicating the themes and purposes of the trail. The following are examples of such goals:

1. Visitors' ability to identify the purposes of the Trail.
2. Visitors' ability to identify and understand the key resources of the Trail.
3. Visitors' ability to understand the major concepts surrounding the Trail's resources, such as "watershed" and "ecosystem."
4. Visitors' ability to identify the major themes of the Trail.
5. Visitor's ability to identify and understand the roles of major cultural groups and personalities in the Trail's stories.
6. Visitors' understanding of the need to preserve, protect and restore Bay resources.
7. Increased volunteerism in stewardship activities.

The measurable outcomes should be directly related to the learning or behavioral objectives for a given project.

### **Data Collection**

The National Park Service conducts annual postcard surveys at system units; samples of such surveys may be obtained from the NPS and the Office of Management and Budget (OMB). Personal surveys and interviews are effective tools that partners may use to collect data at their sites. (Federal sites are required to go through OMB to obtain approval for surveys and some interviews.) A number of additional statistical data, such as visitation counts, trail usage, and distribution of publications, should also be collected so that trends may be determined and the effectiveness of Trail programs and projects can be measured.

### **Promoting Safety**

The recreational activities visitors engage in during their visits to sites and segments of the Trail may entail various amounts of risk. Visitors must have enough information to be prepared for a safe experience on the Trail, and they must know where they can get assistance. Safety messages must be clear and present on all orientation signage and publications, and should be articulated during all interpretive and educational programs. Water safety, wildlife cautions, seasonal weather considerations and other personal safety precautions should be identified. All orientation materials should clearly indicate where potable water and food may be acquired, and where first aid, restrooms, and visitor information are available.

### **Inspiring Stewardship**

The overarching goal of the Captain John Smith Chesapeake National Historic Trail is to inspire an ethic of conservation and stewardship among Trail users. The Trail provides a variety of opportunities for area residents and visitors to explore the special places and vast resources associated with the Chesapeake, and gain an understanding and appreciation for the values intrinsic to the region. All Trail-related projects, programs and activities should be developed with the Trail's paramount intent - instilling stewardship - at their core.

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### Early Implementation Projects

Project Title	Year Initiated	Site/ Organization	Project Description	Date Completed				On-going	Notes
				2006	2007	2008	2009		
Patuxent Encounters	2006	Jefferson Patterson Park and Museum, St. Leonard, MD	A multi-faceted program about Patuxent Indians and Captain John Smith includes: pre-European village, wayside exhibits, print and web-based materials, seven-part speaker series, and a two-day festival coinciding with the arrival of the shallop.			X			
Interpretive Trails: John Smith's Adventures on the James	2006	VA Department of Conservation and Recreation, Richmond, VA	Interpretive auto and water trails with signage, maps, and collateral materials regarding Smith's explorations in Virginia during 1607-1609. More than 35 points of interest interpret the early colonial experience in the region. A website links to educator resources.			X			
Speaker Series and Calendar of Events: "John Smith's Chesapeake – Nine Perspectives"	2006	Coordinated by Calvert Marine Museum, Solomons, MD	Collaboration of eleven Gateways in Calvert and St. Mary's counties offers John Smith's Chesapeake speaker series. Informative calendar lists the nine presentations and other Gateway Smith-related programs for 2007.		X				
Exploring the Landscape of the Early 17 <sup>th</sup> Century Chesapeake	2006	NPS, PA State University, Smithsonian, CBMM & Historic St. Mary's City	Web-based program uses photorealistic landscape visualization technology to allow visitors to track Smith's journeys, learn about the native American inhabitants, and explore dramatic changes in the Bay through time.		X				
"Survivor: Jamestown"	2007	Virginia Living Museum, Newport News, VA	This highly interactive exhibit explores how difficult life was for early European settlers in Virginia, and how different the Chesapeake environment was four hundred years ago as compared to today.		X				
"The Old New World: Re-creating a Chesapeake Indian Village"	2007	First Landing State Park, Virginia Beach, VA	In a joint effort with the Nansemond Indian Tribe, the park developed an authentic Virginia Algonquian Indian Village that includes a chief's house, a sweathouse, and areas devoted to food preparation and crafts. Interpretive materials focus on the culture of the Chesapeake Indians and their connections to the Chesapeake Bay.		X				

Project Title	Year Initiated	Site/ Organization	Project Description	Date Completed				On-going	Notes
				2006	2007	2008	2009		
Interpretive Signage Project	2007	Lawrence Lewis Jr. Park, Charles City, VA	A series of interpretive panels describe the natural and cultural world of the Chesapeake in the early 1600s.		X				
Virginia State Parks in America's First Region: Recreation and Stewardship along the Captain John Smith Chesapeake NHT	2007	Chippokes Plantation, and First Landing, Kiptopeke and York River State Parks, Hampton Roads area, VA	New interpretive signage will highlight the ecological history of the Chesapeake Bay and river watersheds. The project will provide teacher training and field-based educational experiences for students, as well as public "paddlefests" to promote safe, responsible boating.					X	Extended to 9/09
"Reading the Signs: Changes to the Chesapeake Bay since Its Exploration by Captain John Smith"	2007	Jefferson Patterson Park and Museum, St. Leonard, MD	This project will combine research and educational programming to document and interpret the changes to the Chesapeake Bay watershed since the seventeenth century. An archaeological collection will be paired with existing research to create a curriculum-based program for middle school students featuring classroom, field, and laboratory components.				X		
Mount Landing Creek Water Trail	2007	Rappahannock River Valley National Wildlife Refuge, Tappahannock, VA	A new water trail guide will address important wildlife habitats and the connection of the Rappahannock River to the Chesapeake Bay. Interpretive wayside exhibits will link the site to Smith's 1608 exploratory voyages.					X	
Captain John Smith Chesapeake NHT Signage	2007	Sailwinds Visitor Center, Cambridge and Vienna, MD	Signage at the Sailwinds Visitor Center will orient visitors to trail exploration opportunities in the county, highlighting the Nanticoke River. In Vienna, additional interpretive signage will focus on Smith's voyages, Vienna's history, and important visitor services information.				X		
"From this Spot You Can See Over 400 Years of History"	2008	Annapolis Maritime Museum, Annapolis, MD	Interpretive panels along the water's edge will highlight cultural and landscape changes that have occurred in the Chesapeake region during the last four hundred years.					X	

Project Title	Year Initiated	Site/ Organization	Project Description	Date Completed				On-going	Notes
				2006	2007	2008	2009		
Captain John Smith's Explorers' Camp	2008	Mason Neck State Park, Lorton, VA	A one-week summer day camp will be provided free of charge for 150 at-risk youths. Campers will explore the park's rich historic, cultural, and natural resources in a layered outdoor educational experience that supplements the state's Standards of Learning for History and Science.					X	
Native American Interpretive Brochure	2008	Piscataway Park, Accokeek, MD	A four-color brochure, developed in consultation with Native American scholars, will present a series of brief explanations of the ancestral Piscataway presence at Accokeek, the effects of the colonial period, and the continuing legacy of indigenous presence at Accokeek.					X	
"Before the Lees: 17th Century Environmental and Cultural History at Stratford Hall"	2008	Stratford Hall Plantation, Stratford, VA	New wayside exhibits will focus on the colonial environment of the Stratford site and on the early European inhabitants who occupied the area. The exhibits will emphasize the Chesapeake Bay and its ecology during the early days of European settlement, and how colonists interacted with the environment.					X	
Improving Existing Trailheads through Signage Development	2008	Elk Neck State Park, North East, MD	New interpretive signage will highlight Chesapeake Bay ecology and Bay stewardship, Smith's 1608 explorations, and the Turkey Point Lighthouse					X	
Nanticoke River Water Trail Phase I Development	2008	Nanticoke River Water Trail, DE	A detailed water trail map and guide will include information on existing public access, GPS points, river features, area services, and watershed characteristics. Signs and trail markers will be installed to direct visitors and identify existing access areas.					X	
Enhanced Access Project	2008	Piney Point Lighthouse, Museum and Historic Park, Leonardtown, MD	A new floating, step-down platform will facilitate the launching and retrieval of kayaks in a protected creek off the Potomac River. Interpretive components will highlight the values of the associated wetlands environment.					X	

Project Title	Year Initiated	Site/ Organization	Project Description	Date Completed				On-going	Notes
				2006	2007	2008	2009		
John Smith Trail Expeditions and John Smith's Shallop	2008	Schooner Sultana, Chestertown, MD	Using a fleet of canoes and kayaks, guides will take students, teachers, and members of the general public out for single- and multi-day educational trips on portions of the Captain John Smith Chesapeake NHT. Also, Sultana Projects will partner with the Calvert Marine Museum to host a seven-month exhibit of the John Smith shallop to help visitors better understand the historical context and impact of Smith's voyages.					X	
James River Water Trail Stewardship Planning and Educational Outreach	2008	Lower James River Water Trail, Richmond, VA	This project will further develop the water trail on the lower James River through interpretive programs, conservation analysis, and outreach to landowners along the trail. Guided educational trips will be provided on the river, with a member of the Chickahominy Tribe providing the Native American perspective.					X	
"Beyond Jamestown: Life 400 Years Ago"	2008	Havre de Grace Maritime Museum, Havre de Grace, MD	Interior exhibits and teaching stations will highlight the historical significance of Captain Smith's voyages, the lifeways of the native Susquehannock culture, and continued European settlement to 1660, showcasing the pre-contact environment of the Bay. Exterior exhibits will guide visitors from the pier on the Bay to the Maritime Museum, introduce the history and culture of the area, and orient visitors to other local gateways.					X	
Add CAJO Content to Chesapeake Bay Gateways and Watertrails Network Website		NPS www.baygateways.net	Designated gateways and water trails along the Smith routes have pages with orientation and visitor information incorporated into the popular CBGN website. The visiting public has access to trip planning tools, as well as thematic interpretive content		X				
Develop and launch NPS.GOV CAJO Website		NPS www.nps.gov/cajo	This website serves as a portal for visitors to access an introduction to the themes and purposes of the Trail, as well as information on Trail planning and management.		X				

Project Title	Year Initiated	Site/ Organization	Project Description	Date Completed				On-going	Notes
				2006	2007	2008	2009		
Develop a Trail Logo		NPS	A Trail logo has been developed (and revised to meet NPS requirements). The logo serves to identify media/products associated with the Trail.		X				
Develop an Initial Unigrid Brochure		NPS	The tri-fold, full-color leaflet provides an overview of the Trail, including a notation regarding the trail planning process. The leaflet was available in time for the May 2007 launch of Trail.		X				
Develop Traveling Exhibits		NPS/Trail Partners	A series of free-standing exhibits outline the routes of Smith's explorations and provide basic information regarding the Trail and its development.		X				
Create a Colonial Poster Guide (The Colonial Chesapeake)		NPS	The guide introduces visitors to the colonial period on the Chesapeake from 1607 to the 1700s and highlights the Gateways where those stories may be experienced; an associated interactive web module is available on the CBGN website.		X				
Develop a Reference book re; Smith Voyages, the Chesapeake Peoples and the Bay of 1607		NPS/Trail Partners	(John Smith's Chesapeake Voyages 1607-1609) A team of historians, archeologists and environmental scientists developed a fourteen-chapter book with 150 maps and illustrations.	X					
Shallop Reenactment Voyage		Sultana Projects, Inc., Chestertown, MD & Trail Partners	A crew of modern explorers retraced Captain John Smith's 1608 Chesapeake expedition traveling in a replica shallop.		X				
Interpretive Tours		NPS	Two seasonal interpretive rangers provided tours of the Trail at Jamestown.			X			
CBIBS		NOAA & Trail Partners	Placement of interactive buoys along the Trail route.			X		X	6 buoys were in place by Dec. 08
Smart Buoy Gateway Kiosk		NOAA & Nauticus	Install a land kiosk that is electronically "tethered" to the Elizabeth River "smart buoy" (part of CBIBS).			X			
MOU between NOAA & NPS		NOAA & NPS	Memorandum of Understanding signed committing both agencies to work collaboratively on the Trail, CBIBS & CBGN.			X			



## ***Preliminary Action Plan***

The following inventory lists potential activities and projects the NPS and/or Trail partners have begun or will undertake to develop and operate the interpretive components of the Captain John Smith Chesapeake National Historic Trail. This list is not all-inclusive; it serves as an initial guide for developing and implementing the Trail's interpretive framework. As the Comprehensive Management Plan is further developed, it is anticipated that this Action Plan will be revised and augmented. A site-specific template and a sample planning matrix are in **Appendix M**.

## ***Tools and Guidelines for Implementation***

### Preliminary Action Plan

Project Title	Site/ Organization	Project Description	Target Date for Completion					Notes	
			2009	2010	2011	2012	2013		Future
<b>Provide Internet Services</b>		Provide engaging, information-rich online experiences is an important offering on the interpretive media menu. The NPS and Trail partners will provide interpretive content to educate and provoke visitors; interactive tools to help guide users as they plan their visits to Trail sites and segments; and information related to Trail planning and management. The user experience will be extended beyond the desktop through the addition of podcasts and video to download place-based information that can be accessed on-site through geolocation.							
Develop/launch CAJO Website	NPS/Trail Partners	A new NPS website (slated to launch in 2009) will provide extensive interpretation of Smith's Chesapeake voyages, Chesapeake Indians, and the Bay. It will orient visitors to sites, and land and water routes in the Chesapeake region where they can experience first-hand the Bay's cultural and natural resources. (Trail) Friends plan to launch a similar CAJO website in 2009.	<b>X</b>						Gather in-put from partners.
Create Links to Partner Websites	NPS/Trail Partners	A number of substantive online resources have been created by NPS and Trail partners that orient users to an array of interpretive information about Captain John Smith, Chesapeake Indians, and the Bay. Linkages between websites will be created where applicable.	<b>X</b>						When the CAJO website launches in 2009 it will include links.  On-going.
Collect/provide PDF's of Existing Water Trail Map and Guides	NPS/Trail Partners	Provide electronic, printable downloads of existing water trail map and guides on CAJO/other websites for the public to utilize in planning their trips and while traveling on the water.	<b>X</b>						On-going.

Develop an Web-based Tour Guide	NPS, NOAA & other Trail Partners	Develop new tools and content to be integrated into the CAJO website, and create mobile applications that extend the user experience beyond the desktop through the use of geolocation; integrate these materials with CBIBS.		X					On-going
Develop a GPS Downloadable Trail Map (or series of maps)	NPS/Trail Partners	Create a trail map data layer that can be downloaded onto a variety of GPS units for use by kayakers, power boaters and sailing craft.		X					On-going.

Project	Site/Organization	Project Description	2009	2010	2011	2012	2013	Future	Notes
<b>Orientation Facilities, Programs and Materials</b>		Adequately orienting and guiding visitors is essential to sustaining a viable trail. Building an identity for the Trail is the most basic means of helping visitors to recognize multiple modes of experiencing the Trail as a set of unified experiences. Standardized materials, exhibits, and other media will serve to reinforce the Trail's identity, even with the constant interface of land and water experiences stretching along 3,000 miles.							
Develop Graphic Guidelines for the Trail	NPS	Establish/distribute graphic guidelines (in accordance with the NPS <i>Graphic Identity Program</i> and the <i>CBGN Graphic Guidelines</i> ) for all approved Trail-related publications, exhibits, and audio/visual programs.	X						Gather in-put from partners.
Develop an Updated Unigrid Brochure	NPS	Create a full-color leaflet to provide an expanded overview of the Trail.		X					
Develop Additional Traveling Exhibits	NPS/Trail Partners	Produce additional portable exhibits to support outreach efforts, as needed.		X					On-going.
Develop a Map and Guide (or series of guides)	NPS/Trail Partners	Develop a detailed map and guide (or series) for the Trail related to a variety of travel modes (boating, auto touring, biking, etc.); make available in printed form and on CAJO/other websites.		X					Numerous guides are already available. On-going.
Develop Trip Itineraries	NPS/Trail Partners	Develop land and water-based itineraries (beyond those available for the <u>initial</u> CAJO website launch); use a regional approach; develop other associated publications.		X					Some itineraries are already available. On-going.

Produce a Trail Orientation Film	NPS	Produce an 8-10-minute digital audiovisual program (for use at museums, welcome centers, and other sites) to communicate the Trails' core themes and to motivate audiences to visit Trail sites and/or segments and to learn more about Trail-related resources.			X					NPS can take lead; gather in-put from partners.
Produce an Introductory PowerPoint Presentation	NPS	Develop a PowerPoint program (for use at outreach events) that provides an introduction to the Trail and a menu of visitor opportunities; program will be adaptable to better serve specific audiences and/or forums.		X						Incorporate in-put from partners.
Develop Welcome Centers within Existing Facilities	NPS/Trail Partners	Establish NPS and/or non-NPS Trail welcome centers within existing facilities around the Bay.			X					On-going.
Develop New Welcome Center Facilities	NPS/Trail Partners	Create NPS and/or non-NPS Trail welcome centers in new facilities at additional locations around the Bay.						X		Plans to develop a Center in Vienna, MD are underway. On-going.
Develop Electronic Kiosks	NPS/Trail Partners	Provide interactive electronic kiosks (such as the touch-screen kiosks employed at Virginia State Parks) for welcome centers, interpretive centers and other appropriate sites to allow visitors to access web-based information regarding the Trail, and associated services.	X							NPS & (Trail) Friends initiated development of a kiosk for Colonial NHP to be installed in 2009. On-going.
Identify all Trail-related Services	Trail Partners	Inventory/distribute information related to tour guides, restaurants, hotels, etc.; make information available via a guidebook(s) and/or tourism/other partner websites.		X						On-going.

Project	Site/Organization	Project Description	2009	2010	2011	2012	2013	Future	Notes
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<b>Trail Access and Signage</b>		Much attention will be focused on the means for accessing the Trail. Marking the Trail, identifying existing access points, and creating new access points will be important on-going tasks associated with "trail-building" for the foreseeable future.							
Identify and Prioritize Existing Trail Access Points	NPS/Trail Partners	Inventory all existing access points; sites with notable interpretive potential will be highest priority for signage and/or development.	<b>X</b>						NPS initiated access inventories with MD DNR, VA DCR & DE DNREC. On-going.
Develop New Trail Access Points	NPS/Trail Partners	Create new access points in places where a clear "gap" (in access) exists, and where development is feasible.	<b>X</b>						On-going.
Inventory Existing Trail-related Water Trails	NPS/Trail Partners	Inventory existing water trails along the Trail; identify existing signage and interpretive components.	<b>X</b>						
Develop New Trail Segments	NPS/Trail Partners	Develop new formal water trails (with associated signage and interpretive components).	<b>X</b>						Some new water trail initiatives are underway (including Nanticoke Water Trail in DE). On-going.
Increase Camping Facilities	NPS/Trail Partners	Seek opportunities to increase the camping facilities associated with the Trail at appropriate locations.			<b>X</b>				On-going.
Develop Wayfinding Methods, Standards and Prototypes	NPS/Trail Partners	Create standard Trail site/segment directional markers (prototypes), and wayfinding systems to effectively guide visitors.	<b>X</b>						

Develop Standard CAJO Identifying Signage for Recognized Sites along the Trail	NPS	Develop standard signage that identifies sites and segments as official components of the Trail (similar to the identifying signage created for members of the CBGN, containing a purpose statement for the Network, bold, thematic imagery, and means for self-service distribution of CBGN brochures).		X						Gather in-put from partners. Coordinate with partners' signage policies & requirements .
Develop Access Point Orientation Kiosk Prototypes	NPS	Develop a unified system of orientation kiosks for Trail access points to provide introductory Trail information, relevant maps, and orientation and safety information.		X						Gather in-put from partners.

Project	Site/Organization	Project Description	2009	2010	2011	2012	2013	Future	Notes
<b>Interpretive Services</b>		The purposes of the National Historic Trail can only be achieved if visitors have opportunities to understand the relevance of a place in the context of the Trail's themes, stories and historic events. To accomplish that objective, site-based interpretive media and programming should be developed for access points, for places of cultural, historical and natural interest, and for information centers. The actions listed below will -- when implemented -- help visitors make their own connections with the meanings and significance of the Trail's natural and cultural resources.							
Identify and Prioritize Key Interpretive Sites along the Trail	NPS/Trail Partners	Inventory the sites/segments that provide opportunities to explore the Trail's core themes in-depth.	X						On-going.
Develop Waysides and Exhibits at Key Interpretive Sites	NPS/Trail Partners	Develop site-based interpretive exhibits for areas along the Trail with rich interpretive potential.	X						Numerous exhibits are in place. On-going.

Develop Waysides and Exhibits at Other Sites	NPS/Trail Partners	Develop site-based interpretive exhibits for areas along the Trail with moderate interpretive potential.			X					On-going.
Provide a Variety of Visitor Experiences and Programs	NPS/Trail Partners	Develop/implement a range of experiences and programs related to the Trail's core themes (including "packaged" experiences).	X							Some programs are in place. On-going.
Develop a Mobile Tour Guide	NPS/Trail Partners	Create a portal for tour podcasts, audio & video podcasts, or wireless media streams.		X						On-going.
Develop a Handbook on Chesapeake Indian Tribes	NPS/Trail Partners	Research, write and publish an NPS Handbook on Chesapeake Indian tribes with extensive American Indian consultation.		X						
Expand the Chesapeake Bay Interpretive Buoy System (CBIBS) Program	NPS, NOAA, other Trail Partners	Provide additional interpretive information, a Trail user piece, and the ability to access NOAA's data on CAJO/other websites.		X						On-going.
Create Land-based Linkages to CBIBS	NPS/Trail Partners	Develop on-land kiosks, and links to land-based Trail sites/providers.	X							One kiosk is in place @ Nauticus; a second one is under development. On-going.
Create Additional Poster Guides	NPS/Trail Partners	Develop poster guides associated with the Trail's core themes.							X	

Project	Site/Organization	Project Description	2009	2010	2011	2012	2013	Future	Notes
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<b>Environment al Education</b>		Hundreds of curricula relating to the Chesapeake Bay have been developed by schools, parks, museums, and conservation organizations, including many that relate directly to the Trail's core themes (given the recent focus on the Jamestown quadricentennial). These curricula need to be identified and supplemented as needed. New curricula may be developed to strengthen certain areas of study, as well. All existing and new materials should be made readily available to educators throughout the Chesapeake region, and beyond. The Trail and its themes provide a suitable venue for curricula that help to address the need for enhanced outdoor environmental education (as expressed in the recent "No Child Left Inside" initiative, and in books such as <i>Last Child in the Woods</i> ); and historical education (related to Native Americans and European colonization).							
Identify and Collect Existing Trail-related Curricula	NPS/Trail partners	Gather existing education curricula related to the historic journeys of Captain John Smith, the Chesapeake Indians and the natural history of the Bay; make available on CHART and on CAJO/other websites.	<b>X</b>						On-going.
Develop new Trail-related Education Curricula	NPS/Trail partners	Develop new curricula related to the Trail's core themes; make available on CHART and on CAJO/other websites.	<b>X</b>						On-going.
Conduct Accredited Teacher Workshops	NPS/Trail partners	Conduct workshops to orient teachers to Trail-related education curricula and educational experiences through the Trail; provide continuing education units (CEUs).			<b>X</b>				

Develop Programs Targeted for Students	NPS/Trail Partners	Develop programs targeted for school groups, including camps, living history programs, etc.	X							National Geographic & partners are developing "FieldScope" program with a targeted 2009 launch. On-going.
Develop Distance Learning Programs	NPS/Trail partners	Create/launch programs associated with Trail sites, segments, resources and core themes.				X				

Project	Site/Organization	Project Description	2009	2010	2011	2012	2013	Future	Notes
<b>Recruit/Assist Partners</b>		The Trail has been legislated as a collaboration of public and private partnerships – its magnitude demands such a cooperative effort in order for it to succeed. Partnerships will be cultivated to develop and implement the Trail and to accomplish its goals through a variety of means including shared funding, partner-to partner networking, and training.							
Recruitment: Reach Out to Potential Partners/Providers	NPS/partners	Share information and dialogue with potential partners/providers, including non-traditional partners.	X						Recruitment has begun. On-going.
Recruitment: Formally Engage Gateways and Other Sites/Providers	NPS	Establish criteria for partners to formally join the Trail; implement formal agreements (or amend existing agreements).	X						MOUs are in process with approximately 100 Gateways.
Funding: Allocate CBGN Funding for Trail-related Projects	NPS	Provide financial assistance for Gateway sites/trails to complete projects related to development and implementation of the Trail (FY05 - FY09 and beyond)	X						Funding has been/will be provided. On-going.
Funding: Seek Additional Funding Sources	NPS/partners	Seek additional federal and non-federal funding to support Trail-related projects at partner sites.	X						On-going.

Training and Coordination: Develop a Web-based Construct for Networking	NPS/partners	Create and implement a web-based construct for partners to easily and regularly share information (re: events, interpretive approaches, etc.)	X							The NPS CAJO website will have such a construct.
Training and Coordination: Produce a Trail Orientation Training Program	NPS/partners	Develop a training program and associated materials/manual for welcome center/Trail segment/site staff and other providers (outfitters, tour operators, business owners, etc.).	X							Trail Friends, CBF & NPS have initiated development of a program. On-going.
Training and Coordination: Develop a Certification Program for Providers	NPS/partners	Create/implement a program and certification process for outfitters, tour operators, and other Trail providers.	X							Trail Friends, CBF & NPS have initiated development of a program. On-going.
Training and Coordination: Develop an Interpreters' Handbook	NPS/partners	Include background information, and prototype interpretive scripts and programs related to the Trail's core themes.		X						
Training and Coordination: Conduct Meetings, Regional Workshops and Conferences	NPS/partners	Gather partners/providers to share information and resources, and to promote coordinated/optimum Trail-related programs and services.	X							(CBGN) Friends, NPS, CBMM & D-Lite are conducting workshops. On-going.

Project	Site/Organization	Project Description	2009	2010	2011	2012	2013	Future	Notes
<b>Research</b>		The core themes of the National Historic Trail open the door to a vast field of subject matter that can be further illuminated through historical and scientific research. Partners and managing entities will further research through data gathering, and development of new research. Various means of presenting the research will be employed, such as symposia and publications.							
Collecting Existing Trail-related Historical Data	NPS/partners	Gather/inventory existing data, oral histories, and/or artifacts related to the Trail's core themes.	X						Process has begun. On-going

Conduct Additional Research	NPS/partners.	Conduct research related to the Trail's core themes.		X					On-going.
Conduct Symposiums	NPS/partners.	Gather researchers, partners and the public to share existing Trail-related research findings and to initiate new research.	X						On-going.

Project	Site/Organization	Project Description	2009	2010	2011	2012	2013	Future	Notes
<b>Marketing</b>		Along with the aforementioned creation of a unified trail identity and the development of informational media, marketing the Trail will be indispensable to its success in drawing users, and creating and sustaining a public support base. Identifying markets, developing marketing strategies and tools, and providing avenues to engage partners in marketing efforts will require a great deal of coordination among the NPS and existing/future partners.							
Develop a Marketing Strategy	NPS/partners	Create a five-year marketing plan for NPS and partners/providers.		X					
Coordinate a Follow-up Trail Launch	NPS/partners	Establish an official launch date/event for the Trail (to follow on the 2007 initial launch).		X					
Engage State and County Tourism Departments	NPS/partners	Recruit state and county tourism departments to help market the Trail; develop and implement formal agreements.	X						State Tourism agencies are involved. On-going.
Reach Out to Varied Media Markets	NPS/partners	Distribute information to and form relationships with television, radio, newspaper, and magazine outlets.	X						On-going.
Develop Prototype Media Kits	NPS/partners	Develop and distribute media packets, news release templates, and other materials to Trail partners/providers.		X					On-going.
Develop a Trail Prospectus	NPS/partners	Develop a full-color prospectus to market the Trail to decision-makers, potential donors/partners, etc.		X					
Conduct CAJO-related Events	NPS/partners	Initiate events to promote the Trail, including sojourns.	X						On-going.
Promote CAJO at Existing Events	NPS/partners	Promote the Trail at local festivals and Bay-wide events.	X						On-going.

Expand stations for (NPS) Trail Passport Stamp.	NPS/partners	The NPS added the Trail to its existing Passport Program for National Park Service units.		X						On-going.
Develop a Trail-specific Passport Program	NPS/partners	Create a passport program to promote and encourage use of the Trail.							X	

Project	Site/Organization	Project Description	2009	2010	2011	2012	2013	Future	Notes
<b>Evaluation</b>		An emphasis on evaluation will be employed throughout the development of the Trail. Existing and/or newly-developed evaluation models will be employed for both Trail-wide and site-specific projects/programs/services.							
Gather Baseline Data		Gather/compile data regarding visitor use trends/numbers on a regional basis.	X						This process has begun.
Adopt and/or Develop Evaluation Tools		Adopt existing or develop/implement tools to measure the effectiveness of Trail programs and services.		X					
Develop a Reporting System		Develop/implement a reporting system for Trail sites, segments and providers.		X					

## **Tools and Guidelines for Implementation**

### **Partnership Agreements**

Partnership agreements ensure that the NPS and its partners work cooperatively to fulfill their roles and achieve the goals and purposes of the Captain John Smith Chesapeake National Historic Trail for the benefit of the public. These recognized partnerships enable the NPS to provide technical and financial assistance to sites and segments of the Trail. Partners and providers managing sites and segments of the Trail will enter into partnership agreements with the NPS before implementing projects identified as products of the Captain John Smith Chesapeake National Historic Trail, and before they may identify themselves as members of the Trail.

A template for existing Chesapeake Bay Gateways and Watertrails Network agreements is in **Appendix N**; a template for Captain John Smith Chesapeake National Historic Trail agreements is in **Appendix O**.

### **Chesapeake Bay Gateways Network Technical and Financial Assistance Program**

The NPS provides technical and financial assistance to member Gateways and connector routes that meet the goals established for the Chesapeake Bay Gateways and Watertrails Network to provide public access to Bay resources, interpretation, and stewardship opportunities. These goals are in accord with the goals of the Captain John Smith Chesapeake National Historic Trail.

Technical assistance is available through workshops, conferences, one-on-one consultations and a series of manuals and guides. (A *Water Trail Toolbox* is in **Appendix P**.)

Financial assistance awards may be used for a variety of projects that support the Trail goals - to help people:

- understand Trail-related resources through stories and places;
- gain access to those places and resources; and
- experience conservation stewardship and be motivated to get involved.

The 2009 Chesapeake Bay Gateways Network Grant Guidelines are in **Appendix Q**.

All currently designated Gateways are eligible to apply for financial assistance. If a partner is not a designated Gateway they are not eligible to apply. Gateways are designated through a nomination process entirely separate from the review of grant proposals. Information about the nomination process is available on the Gateways website at [www.baygateways.net/join.cfm](http://www.baygateways.net/join.cfm).

## **Evaluation**

Measurable goals for success should be articulated for all projects implemented for the National Historic Trail, as should means for measuring the effectiveness of projects in communicating the themes and purposes of the trail. The following are examples of such goals:

1. Visitors' ability to identify the purposes of the Trail.
2. Visitors' ability to identify and understand the key resources of the Trail.
3. Visitors' ability to understand the major concepts surrounding the Trail's resources, such as "watershed" and "ecosystem."
4. Visitors' ability to identify the major themes of the Trail.
5. Visitor's ability to identify and understand the roles of major cultural groups and personalities in the Trail's stories.
6. Visitors' understanding of the need to preserve, protect and restore Bay resources.
7. Increased volunteerism in stewardship activities.

The measurable outcomes should be directly related to the learning or behavioral objectives for a given project.

## **Data Collection**

The National Park Service conducts annual postcard surveys at system units; samples of such surveys may be obtained from the NPS and the Office of Management and Budget (OMB). Personal surveys and interviews are effective tools that partners may use to collect data at their sites. (Federal sites are required to go through OMB to obtain approval for surveys and some interviews.) A number of additional statistical data, such as visitation counts, trail usage, and distribution of publications, should also be collected so that trends may be determined and the effectiveness of Trail programs and projects can be measured.

## **Promoting Safety**

The recreational activities visitors engage in during their visits to sites and segments of the Trail may entail various amounts of risk. Visitors must have enough information to be prepared for a safe experience on the Trail, and they must know where they can get assistance. Safety messages must be clear and present on all orientation signage and publications, and should be articulated during all interpretive and educational programs. Water safety, wildlife cautions, seasonal weather considerations and other personal safety precautions should be identified. All orientation materials should clearly indicate where potable water and food may be acquired, and where first aid, restrooms, and visitor information are available.

## Inspiring Stewardship

The overarching goal of the Captain John Smith Chesapeake National Historic Trail is to inspire an ethic of conservation and stewardship among Trail users. The Trail provides a variety of opportunities for area residents and visitors to explore the special places and vast resources associated with the Chesapeake, and gain an understanding and appreciation for the values intrinsic to the region. All Trail-related projects, programs and activities should be developed with the Trail's paramount intent - instilling stewardship - at their core.

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## **APPENDIX A:**

### **SENATOR PAUL SARBANE'S COMMENTS RE: S. 2568**

In December, 2006, Senator Paul Sarbanes (Maryland) spoke in support of S. 2568:

The Captain John Smith Chesapeake National Historic Trail Designation Act would create the Nation's first national "watertrail" and honor one of America's earliest explorers, Captain John Smith, and the vital role he played in the founding of the first permanent English settlement in North America at Jamestown, Va., and in exploring the Chesapeake Bay region during the years 1607 to 1609.

Many Americans are aware of the upcoming 400th anniversary of Jamestown next year. The celebration is expected to draw record numbers of visitors to this area, including Queen Elizabeth II, as part of her recently announced state visit. What may not be as well known is that Jamestown and John Smith's voyages of exploration in present-day Virginia and Maryland were our Nation's starting points. America has its roots right here in the Chesapeake Bay region nearly 400 years ago—13 years before the founding of the Plymouth colony—when the Jamestown colonists disembarked from their three small ships on May 13, 1607. Under the leadership of Captain John Smith, the fledgling colony not only survived but helped ignite a new era of discovery in the New World. . . .

What better way to commemorate this important part of our Nation's history and honor John Smith's courageous voyages than by designating the Captain John Smith Chesapeake National Historic Trail? The Congress established the National Trails System "to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation." National Historic Trails such as the Lewis and Clark Trail, the Pony Express Trail, the Trail of Tears, and the Selma to Montgomery Trail were authorized as part of this system to identify and protect historic routes for public use and enjoyment and to commemorate major events which shaped American

history. In my judgment, the Captain John Smith Chesapeake National Historic Trail is a fitting addition to the 13 national historic trails administered by the National Park Service.

Pursuant to legislation we enacted as part of the Fiscal 2006 Interior Appropriations Act, in September 2006 the National Park Service completed a detailed study which found that the trail meets all three criteria for designation as a national historic trail: it is nationally significant, has a documented route through maps or journals, and provides for recreational opportunities. Similar in historic importance to the Lewis and Clark National Trail, this new historic trail will inspire generations of Americans and visitors to follow Smith's journeys, to learn about the roots of our Nation, and to better understand the contributions of the Native Americans who lived within the bay region. Equally important, the Captain John Smith Chesapeake National Historic Trail will serve as a national outdoor resource by providing rich opportunities for education, recreation, and heritage tourism not only for more than 16 million Americans living in the bay's watershed but for visitors to this area. . . .

The Captain John Smith Chesapeake National Historic Trail Act comes at a very timely juncture to educate Americans about historical events that occurred 400 years ago right here in Chesapeake Bay, which were so crucial to the formation of this great country and our democracy. I urge my colleagues to support this measure.

## APPENDIX B:

### STATEMENT OF NATIONAL SIGNIFICANCE

(Appendix D of feasibility study; John S. Salmon, Project Historian )

#### 1. Introduction and Findings

This report evaluates the national significance of the trail known as the Captain John Smith Chesapeake National Historic Water Trail, which incorporates those parts of the Chesapeake Bay and its tributaries that Smith explored primarily on two voyages in 1608. The study area includes parts of four states—Virginia, Maryland, Delaware, and Pennsylvania—and the District of Columbia.

Two bills introduced in the United States Congress (entitled the Captain John Smith Chesapeake National Historic Watertrail Study Act of 2005) authorized the Secretary of the Interior to “carry out a study of the feasibility of designating the Captain John Smith Chesapeake National Historic Watertrail as a national historic trail.” Senator Paul S. Sarbanes (Maryland) introduced S.B. 336 on February 9, 2005, and Senators George Allen (Virginia), Joseph R. Biden, Jr. (Delaware), Barbara A. Mikulski (Maryland), and John Warner (Virginia) cosponsored it. The bill was referred to the Committee on Energy and Natural Resources Subcommittee on National Parks on April 28. On May 24, 2005, Representative Jo Ann Davis (Virginia) introduced H.R. 2588 in the House of Representatives, and 19 other Representatives from the four relevant states signed on as cosponsors. The bill, which is identical to Senate Bill 336, was referred to the House Committee on Resources on May 24, and to the Subcommittee on National Parks on May 31. On August 2, 2005, President George W. Bush authorized the National Park Service to study the feasibility of establishing the Captain John Smith Chesapeake National Historic Water Trail as part of the FY 2006 Interior, Environment and Related Agencies Appropriations Act.

The study will apply the criteria of the National Trails System Act (16 U.S.C. 1241 *et seq.*) to determine the feasibility of designation. To qualify for designation as a National Historic Trail, the Captain John Smith Chesapeake National Historic Water Trail must meet three criteria:

**(A) It must be a trail or route established by historic use and must be historically significant as a result of that use.** The route need not currently exist as a discernible trail to qualify, but its location must be sufficiently known to permit evaluation of public recreation and historical interest potential. A designated trail should generally accurately follow the historic route, but may deviate somewhat on occasion of necessity to avoid difficult routing through subsequent development, or to provide some route variations offering a more pleasurable recreational experience. Such deviations shall be so noted on site. Trail segments no longer possible to travel by trail due to subsequent development as motorized transportation routes may be designated and marked onsite as segments which link to the historic trail.

**(B) It must be of national significance with respect to any of several broad facets of American history**, such as trade and commerce, exploration, migration and settlement, or military campaigns. To qualify as nationally significant, historic use of the trail must have had a far-reaching effect on broad patterns of American culture. Trails significant in the history of Native Americans may be included.

**(C) It must have significant potential for public recreational use or historical interest based on historic interpretation and appreciation.** The potential for such use is generally greater along roadless segments developed as historic trails and at historic sites associated with the trail. The presence of recreation potential not related to historic appreciation is not sufficient justification for designation under this category. This report focuses on Criterion B, national significance. Additional documentation will be prepared to evaluate the Captain John Smith Chesapeake National Historic Water Trail against the other criteria, pending review of this draft Statement of National Significance.

Later phases of the study include developing management alternatives and preparing an Environmental Impact Statement as part of the final report. The ultimate objective of the study is to determine how best to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the outdoor areas and historic resources associated with the Captain John Smith Chesapeake National Historic Water Trail.

## **SUMMARY OF FINDINGS**

The study team, composed of professional staff members of the National Park Service Northeast and National Capital Regions, with assistance from respected scholars and consultants, makes the following findings regarding national significance:

The Captain John Smith Chesapeake National Historic Water Trail is of national significance for its association with the following themes:

**(1) Ethnic Heritage (Native Americans): Captain John Smith's Chesapeake Bay voyages are nationally significant because they accelerated the processes that destroyed the Powhatan polity and disrupted the Native peoples' lifeways throughout the region.**

**The Water Trail is significant as:**

- a) the route that John Smith followed in his voyages to American Indian towns and territories
- b) a symbol of the independence of the English colonists from Powhatan's control
- c) a symbol of the impact on and eventual collapse of the Powhatan polity and the Native peoples' lifeways in the Chesapeake Bay and beyond

**(2) Exploration and Settlement: Captain John Smith's Chesapeake Bay voyages are nationally significant because of their impact on the exploration and settlement of North America.**

**The Water Trail is significant as:**

- a) the route that John Smith followed in his program of exploration and discovery in the Chesapeake Bay and its tributaries
- b) a symbol of the spirit of adventure and wonder that were important components of Smith's voyages and English exploration
- c) the route by which Smith gathered information vital to the survival and growth of the English settlements in North America

**(3) Commerce and Trade: Captain John Smith's Chesapeake Bay voyages are nationally significant because of their impact on the commerce and trade of North America.**

**The Water Trail is significant as:**

- a) the route by which John Smith surveyed the Bay and explored for gold, silver, copper, and the Northwest Passage, for the benefit of the commerce and trade of the colony and England
- b) the route by which Smith made contact with American Indian tribes, established trade agreements with them, and increased the chances that the English colony would survive
- c) a symbol of England's trading power, soon to be increased by the production of tobacco for export from the colony
- d) a symbol of the long-term impact on and cultural contact between the Native peoples and European colonists.

**APPENDIX C:**

# **SUMMARY REPORT, 2007-2008 INTERPRETIVE SCOPING MEETINGS (CAPTAIN JOHN SMITH CHESAPEAKE NATIONAL HISTORIC TRAIL, NATIONAL PARK SERVICE)**

## **Introduction:**

This report captures comments and observations of participants in eleven interpretive scoping meetings conducted from September, 2007, to March, 2008, in order to gather information that will form the foundation of the Interpretive Plan for Captain John Smith Chesapeake National Historic Trail. The Interpretive Plan will be an important component of the Comprehensive Management Plan for the Trail. (See Appendix A for meeting dates and places, Appendix B for questions for participants to review prior to each meeting, and Appendix C for a sample meeting agenda.)

## **1. Audiences/Users**

Participants brainstormed the types of individuals and groups that will potentially use the Trail and associated resources:

*Overwhelmingly, participants envision many types of Trail users with specialized interests and even multiple interests. Participants believe the Trail will not see tourists as a predominant group or one specific recreational user group making up a significantly large percentage of Trail visitors. In other words, the Trail will not be like traditional National Park Service sites that attract mostly tourists. Boaters, birders, bicyclists and/or history buffs will all be drawn to the Trail for different reasons.*

*Participants generally hope the Trail will appeal to people with a variety of interests across a wide spectrum of ages and demographics. Many want to make sure local residents learn of all the opportunities the Trail offers in their own areas.*

*With a nod to our interconnected electronic age, virtual visitors are considered as important an audience as those who physically visit a site or sites.*

*Participants recommend using a variety of media to communicate the Trail's messages to all who use the Trail (including those who may not even know they are indeed on the Trail). The participants consider business people and representatives of federal, state, county and municipal government entities as important audiences.*

### Potential Trail Users:

- \*Multi-generations of visitors at each site (activities geared for each)
- \*Families
- \*Local residents
- \*Community museums
- \*Photographers
- \*Artists
- \*Birders/wildlife enthusiasts
- \*International visitors
- \*Paddlers (kayak/canoe)
- \*Sail boaters

- \*Power boaters (cruising/day/weekend)
- \*Jet skiers
- \*Tour boat captains
- \*Auto tourers (including tour buses/school buses)
- \*Hikers/Bikers (cyclists)
- \*Regional/cultural theme tours (e.g. native cultures)
- \*History buffs
- \*Educators
- \*School groups
- \*Anglers
- \*Hunters
- \*Flyovers
- \*Geocachers
- \*Ecotourists
- \*Conservationists
- \*Naturalists
- \*Pet owners
- \*Outfitters/other businesses
- \*Guides
- \*Watermen
- \*Partner organizations
- \*Indian tribes
- \*Non-gateway sites
- \*Gateway sites
- \*Tourism offices
- \*Media representatives
- \*Policy makers
- \*Virtual visitors
- \*Volunteers
- \*Voters
- \*The health conscious (exercise, etc.)

\*Special note from Cambridge, MD meeting:

*More analysis is needed regarding the ways audiences are categorized. Planners should avoid creating hierarchies among audience groups. It would be more beneficial to organize audiences by the types of experiences they seek, and the underlying purposes they have in visiting the area or participating in a particular activity.*

## **2. Key Messages/Themes**

The over-arching goal of the Captain John Smith Chesapeake National Historic Trail is to foster citizen stewardship of the Chesapeake Bay. Smith's voyages, Native American cultures and societies (then and now), and the natural environment of the Bay (then and now) are the three principal storylines (core subjects) on which interpretation of the Trail

will be based. Other stories and themes relate to the land and water of the Chesapeake Bay and its people over time.

Participants were asked to identify the key stories to be highlighted in their region. *Emphasis was placed on interpreting the changes that have occurred to the Chesapeake Bay in order to foster in people a sense of stewardship and responsibility for protecting the Bay and its many resources.*

### **A. Captain John Smith's voyages around the Chesapeake Bay and European settlement**

#### Summary:

*Participants stress the importance of the impact of Captain Smith's voyages and English settlement on the native peoples and the subsequent history of the Chesapeake Bay region. They are most interested in what happened as a result of the voyages and Smith's subsequent map and writings: American Indian cultures were devastated, and a new culture emerged and began 400 years of history that transformed the land and the Bay. Some participants express an interest in the details of the voyages themselves which some characterized as heroic adventures. The main emphasis, though, is to understand how Captain Smith's voyages, European settlement and the changes that followed affected the land and water, and the lives of those who visit or live here today.*

#### Specific Comments:

- \*When two divergent cultures, such as the English settlers and American Indians, converge, challenges and change are inevitable and opportunities are available.
- \*American Indians and Europeans of 1600 had differing perspectives, and tension evolved between the two cultures.
- \*The map produced by John Smith documented the American Indian settlements along the Chesapeake Bay. His map encouraged European expansion which profoundly affected the cultures of both peoples.
- \*John Smith's explorations of the Chesapeake Bay resulted in the transformation from an American Indian culture to a European-based culture.
- \*The Trail will inspire a spirit of adventure and exploration through the recounting of John Smith's adventures on the Chesapeake Bay. Exploration is the hallmark of all human endeavors. People will be motivated to embark on their own journey of discovery.
- \*A pioneering/enterprising spirit drove the development of the Bay.
- \*The English presence here forever changed the lives of American Indians and transformed the land and the Bay.
- \*The Bay influenced the development of today's culture.
- \*Europeans took a long time to "acclimatize" to the environment.
- \*Economic motives drove Smith to explore the Bay.
- \*Captain Smith was looking for resources to take back to England. He was here for a purpose.
- \*The European culture of the colonial period had its own mores and crimes.
- \*Missionaries intending to bring Christianity to American Indians were part of the European colonization effort.

\*Captain Smith and his men endured hardships rowing and sailing all day. They explored with “amazing determination.”

\*Captain Smith’s writings and maps established his significance and spread the news of the resources of the new land.

\*Smith’s explorations established England’s claim to the land. If he had not explored America, the Spanish could have claimed it.

\*John Smith and the English colonists were on a business venture (a “Dot Com boom” of the 1600s) at the expense of natural resources.

\*Smith’s failure to find a ‘Northwest Passage’ turned the explorers’ attention back to the Bay. They focused on the Bay as a resource rather than as a route to somewhere else.

## **B. Native America culture and society (then and now)**

### Summary:

*Participants want to interpret the cultures of American Indians as they existed before European contact and to interpret the cross-cultural contact with the English (how understandings and misunderstandings affected both peoples). Participants recognize the devastation of the American Indians. One commentator characterized the 17<sup>th</sup> through 19<sup>th</sup> centuries in America as a story of a “receding civilization”—Indian civilizations receded as Europeans advanced.*

*Participants also want to tell the often hidden stories of the American Indian groups who live in the region today.*

### Specific Comments:

\*The locations of natural resources associated with the Chesapeake Bay determined where Native Americans settled.

\*Differences between English cultures and Indian cultures led to conflicts and displacement of the American Indian cultures.

\*American Indians were made up of many tribes and diverse cultures.

\*Original cultures lived sustainably in the environment.

\*There is a long-term history of American Indian cultures coupled with environmental history both before and after European contact.

\*Native Americans had their own perspective on Captain Smith’s journeys and their own goals, communications and objectives.

\*Native Americans helped Captain Smith and the Jamestown colonists to survive.

\*Native Americans had their own complex cultures, mores, distinct languages and stories, and these changed over time.

\*There were differences between Maryland and Virginia (and Delaware) Indians. The Virginia tribes’ experiences were different from those of the Maryland (or Delaware) tribes.

\*Oral traditions were prominent in Native American cultures.

\*The land shaped Native American languages and cultures.

\*European colonization affected tribes in different regions of the country on different timelines.

\*American Indian cultures communicated and traded with each other with trade routes and connections across the North American continent. (Cross-cultural contact contributed to a “learning exchange.”)

\*Educate the public about the Accohannoeks’ existence, identity and experience. The tribes took the brunt of first contact with Europeans. Accohannock Indians were the first watermen, farmers and hunter/gatherers. The elders suffered the consequences of segregation. Tell the story of the eastern woodland Indians.

\*American Indians traveled and transported goods by water. Travel was smoother on the water than through forests. They had no horses. Their closest neighbors were across the Bay. Crossing the Bay was not considered far (the sense of distance is different when traveling by water vs. land).

\*The Nanticoke Indians lived in the area near the Nanticoke River for thousands of years. Captain Smith wrote about the Indians he met in Delaware.

\*Tell the stories of what happened to Native Americans after the Smith voyages.

\*Watermen still use fishing traps like the Indians used in 1608.

\*An estimated 20,000 Algonquian-speaking people lived in the coastal plain of Virginia.

\*The pre-contact world was an evolving landscape before the 17<sup>th</sup> century.

\*John Smith described many town sites in his writings.

\*A story of America in the 17<sup>th</sup>, 18<sup>th</sup>, and 19<sup>th</sup> centuries is one of a “**receding civilization**” theme. Indian civilizations receded as Europeans advanced.

### **C. The natural environment of Chesapeake Bay (then and now)**

#### Summary:

*Participants are passionate about communicating the richness and bounty of the Chesapeake Bay in 1600 (a “Garden of Eden”) and contrasting it with the Bay of today where much has been lost. They agree that comparing the Bay of 1600 to today’s Bay is a powerful interpretive strategy.*

*Despite the general awareness of loss, people are also passionate about the beauty of the Bay today. One participant said, “there is a lot out there that can stop your heart.” They want to connect people to the Chesapeake Bay and inspire in them a sense of stewardship, which will lead to further preservation and restoration.*

#### Specific Comments:

\*The Chesapeake Bay represents a confluence of water systems. It served as a rich natural resource for the coming together of three different cultures (American Indian, European and African American).

\*The explorations of Captain John Smith and the settlement of Jamestown by the English brought changes to the Chesapeake—good and bad—that still affect us today.

\*The natural diversity of the Chesapeake Bay has changed and can be preserved.

\*Nature and cultures are resilient in adapting to change.

\*The Trail will inspire people to believe that much of what has been lost in the Bay can be restored and to understand the challenges facing the Bay.

\*The state of the Chesapeake Bay can be contrasted and compared from that of 1600 to the modern landscape of today, with an appreciation of what has been lost.

\*The Bay was once clear to a depth of over six feet.

- \*The confluence of the waterways, land and natural resources would have been “**a veritable Garden of Eden.**” At one time, oyster reefs were hazards to navigation. There were huge fish migrations.
- \*The Chesapeake Bay was the most productive and bountiful estuary in the world. From the (headwaters of the) estuary to open water (the Atlantic Ocean) is an underwater highway.
- \*Populations of menhaden, sturgeon, crabs and oysters have declined.
- \*Human development patterns have had a tremendous negative impact on the health of the Bay.
- \*The Chesapeake Bay is “our Nile.”
- \*The Chesapeake Bay has “**a lot out there that can stop the heart.**” Help define the places that inspire this “**sense of awe.**”
- \*Have “**an adventure in your own backyard.**”
- \*The Chesapeake Bay can be comprehended and understood through geography and mapping, and a geological explanation of how the Bay was formed.
- \*The Trail represents diverse environments, cultures and histories throughout its range.
- \*Understand each site’s significance and connect individual sites to the Bay as a whole.
- \*The Chesapeake Bay is a living thing, a dynamic system and a precious resource that needs protecting and healing.
- \*The Chesapeake Bay is a product of its watershed and the dynamic circulation of water from Bay and ocean to sky to earth.
- \*Connect people to the weather and tides; reconnect people to natural forces. An individual connection to the Bay increases stewardship.
- \*The health of people is linked to the health of the Bay.
- \*One person can contribute to the state of the Bay.
- \*The Bay had a “huge impact” on trade and development. The Bay is a “superhighway” of human movements, trade and commerce (shipping industry includes tankers and food transport). Steamboats used the Bay and the rivers as highways connecting people to markets and to each other.
- \*The Bay has “dead zones”— what is being done about them and the health of the Bay?
- \*Local conditions have shaped life and culture. People respond in certain ways to high water, hurricanes, etc.
- \*Weather and the seasons affect the Bay and the people who live there.
- \* Climate change and changes in the weather will affect the Bay as the wind and tides are altered.
- \*People’s perceptions of swamps have changed – many people see swamps as essential contributors to the fertility of the Bay.
- \*Harvesting the Bay: For four hundred years fishermen and watermen have harvested the food resources of the Bay: shad, sturgeon, crabs, oysters and other species. Fish camps and buy boats are part of this story.
- \****What has made this area attractive and appealing has been its downfall.***
- \*The Chesapeake Bay’s shoreline has changed over time. Examples are at Calvert Cliffs, St. Clement’s Island and Point Lookout.
- \*The Chesapeake Bay is an important stopover for migratory birds on the Atlantic Flyway.

\*Convey the loss of resources. There is a “disconnect” for people driving across the Bay Bridge—people don’t understand the loss of resources when they view a “beautiful-looking Bay.”

\*Celebrate the recovery of wildlife, such as the bald eagles and some golden eagles at the convergence of the Nanticoke and Choptank rivers.

\*Emphasize the living rivers such as the Nanticoke and Choptank rivers with shad, large mouth bass and migratory birds.

\*In Delaware the sand ridges that are old coastal dunes are important to understanding the geology of the area and are home to rare species.

\*The Chesapeake Bay has been a historic locus of recreation with amusement parks, beaches and summer cottages.

\*The environmental history of the Chesapeake Bay includes silting from the erosion caused by the use of the plow in farming, the discharge of sewage and the dumping of garbage. In 1970, the “river was a mess” and you needed to “wash your hands if you touched it.” There has been restoration and conservation.

\*There are success stories such as the removal of the Embury Dam in 2004 and the preservation of a 30-mile corridor.

\*Silt has filled in creeks and rivers. In colonial times, ships could anchor up the creeks.

\*Some sewer plants are doing a good job. The operators are unsung heroes.

\*Captain Smith would have seen a shoreline of massive, old growth trees. Very little old growth forest survives today. Most of the land was cleared before the Civil War.

\*Contrast what Captain Smith found here and the landscape of 17<sup>th</sup> century England where forests had been mostly eliminated.

\*The pace of change around the Bay has accelerated in the last 75-100 years. Eighty percent of the structures have been built since 1950.

#### **D. Other messages and themes**

Participants identified other messages and themes as important to the history, culture and natural history of the Chesapeake Bay, and contributed their perceptions about the development of the Captain John Smith Chesapeake National Historic Trail.

##### Summary:

*Participants recommend interpreting the rich cultural history associated with people living on the land in the Chesapeake region for the past 400 years. Participants express a pride in and a love for the agricultural heritage, the tradition of working on the water, water-based transportation, the small towns, regionally-focused literature and the human history associated with the land.*

*One commentator reminded the group there are and have been three cultural groups in the region: American Indian, European, and African American. Participants express pride in this cultural history and recognize that it has shaped the landscapes we see today.*

##### Specific Comments:

\*The Captain John Smith Trail is not a static entity. The Trail will evolve to create new opportunities for repeat visitors.

\*The Chesapeake Bay has had roles in America's wars, especially the War of 1812 and the Civil War, and the wars have affected the Bay's economies. There have been military installations, e.g. Solomon's Island.

\*The "world of the Chesapeake has changed." The late 20<sup>th</sup> century transportation and commerce was water-based and not land-based as it is now. The change to road travel had lasting impacts. "***You can't truly appreciate the landscape until you approach it from the water.***" Water is a different mode of exploration. The transportation shift occurred from 1910-1950: from water to land; from boats to railroads and roads.

"***Imagine, if you can, a world without roads***". "Our focus on maps has changed from blue (water) to green (land.) We don't see the blue anymore."

\*Tell the story of the changed landscape: changes in vegetation; cultural uses of the land (then and now); relationships (continuum) between modern and past peoples; and the impact of agriculture (especially tobacco).

\*Agriculture has evolved over time: tobacco, enslavement of Africans, plantations, grains, corn, vegetable farming, canneries and the poultry industry.

\*The work of the water and land of the Chesapeake Bay region is an important part of the human culture: crabbing, oystering, trapping, farming, forestry, market hunting, boat and ship building. (Solomons is the "Bugeye Capital of the World.")

\*There is rich literature associated with the Bay: John Barth, Tom Horton, James Michener (*Chesapeake*), William Warner (*Beautiful Swimmers*) and others.

\*African Americans are the third cultural group of the Bay. African Americans have been farmers, watermen and ship builders. They were prominent in the seafood and tobacco industries. There are many black communities, including Unionville and Ivorytown. African Americans have represented 50-60% of the population. Slavery (two hundred years of bondage) is central to the African American story. Frederick Douglass and Harriet Tubman were born and lived on the Eastern Shore. Escaping slaves used roads, rivers and the Bay to travel north to freedom.

\*Tobacco's influence on the land and the economy is a major part of the story of the enslavement and importation of Africans.

\*The story of Black America is tied to the founding of Jamestown. The history of enslavement and colonization is joined together.

\*There are layers of history and environmental change. Human history relates directly to natural history. A new way to learn and understand history is to look at human history through the environment. An example is to look at the steamboat wharfs and the steamboat schedules to show the changes in human history.

\*Calvert Cliffs (which attracted Captain Smith) offer a window into the ancient past, including erosion patterns, archeological secrets, changes in the waterline and the human impacts on the environment vs. natural changes.

\*Flag Ponds offer examples of changes due to human-made controls of erosion, landscape and wildlife.

\*Access to cypress trees was key to native power and to the European development of shipbuilding that promoted maritime commerce.

\*The Patuxent River had the richest density of fish, according to Captain Smith.

\*We know the past through archeology and research.

\*The mapping of the Bay had a central role in colonization, settlement, trade and wars.

\*The Eastern Shore offers a sense of place. It has four biospheres, is unique, is one of the last pristine places, offers contrast to cities and is something we value. It is also at the “tipping point” with a last chance to conserve, preserve and, perhaps, to experience (the region as it has been historically).

\*Shipbuilding flourished in the region near Seaford, Delaware. Sailing rams were built in Bethel.

\*In Delaware, the iron industry flourished during the American Revolution. Rivers and bogs yielded iron ore and trees in the forest provided charcoal used to process ore.

\*Agriculture is a major story on the Eastern Shore of Maryland and in Delaware: farmers raised vegetables, including peas, strawberries and tomatoes, to ship by train to Wilmington and Philadelphia or to sell to local canneries. Sussex County is the “birthplace of the broiler” and a center of the poultry industry. Canneries packed oysters, peas and tomato products. Eastern Shore rivers have mill dams originally built as grist mills.

\*Eastern Shore small towns have a sense of openness, charm and friendliness: The “25 Jewels of Sussex.” Cultural change continues as people move in.

\*Ferries were part of the transportation system (the Woodland Ferry has been operating since 1793).

\*The Chesapeake Bay was a “hot bed of revolution” during the American Revolution and people were active in forming the U.S. Constitution.

\*There was a proliferation of settlement in Virginia after 1728 stimulated by Smith’s explorations and writings.

\*Local residents can tell the story of the changes over time of the landscape and the water. Bridges have been a major cause of change. Development is occurring throughout the Chesapeake Bay watershed. Environmental change caused by siltation continues. There are “lost islands” and “lost towns.”

\*Baltimore was the main connection for the Eastern Shore. The city was easy to reach by water.

\*The Choptank River is linked to the lumber trade.

### **3. Best Places for Access and Interpretation**

Participants in some of the meetings listed the best places for access to the Bay and Bay-related resources. The following best places are grouped with the particular meeting in which they were suggested to associate place names by region.

#### Summary:

*Participants recommended the best places in their area with great enthusiasm. This enthusiasm shows their love and appreciation for and their pride in their areas. They listed many places at each meeting. Many of these—like particular creeks, rivers and islands—may not be so well known outside of the local area. There are so many best places that planners will be challenged in selecting the sites and areas to be emphasized by Trail interpretive media and outreach communications. Some analysis will be necessary to evaluate a particular site’s connection to the key messages and themes of the Trail.*

*Specific Suggestions:*

**From Cambridge, MD meeting:**

- \*Harriet Tubman and others who used the Underground Railroad traveled on trails established by Native Americans.
- \*Blackwater National Wildlife Refuge--the landscape resembles the historic landscapes Captain Smith saw.
- \*Nanticoke River--visitors can experience birding, biking, pristine environments, diverse life of marshes, connections to agriculture and varying landscapes in the north and south regions of Dorchester County.
- \*Sailwinds Visitor Center: "Educate the tourism clerks."
- \*Hooper Island--crab processing
- \*Tilghman Island
- \*Smith Island
- \*Tangier Island (culture built around crabbing, oystering, trapping, farming and forestry)
- \*Bloodsworth Island (Department of Defense)
- \*Poole's Island
- \*Taylor's Island
- \*Poplar Island – a restoration site
- \*Sharp's Island—a lost village and a lost island
- \*Eastern Neck National Wildlife Refuge (tundra swan migration and cultural history)

**From Prince Frederick, MD (Battle Creek Cypress Swamp) meeting:**

- \*Battle Creek Cypress Swamp (shows how the landscape once was)
- \*American Chestnut Land Trust (shows how the landscape once was)
- \*Calvert Cliffs State Park
- \*Potomac sites: Smallwood State Park, Zekiah Swamp (14,000 year occupation)
- \*Native Americans still here (not commonly known)
- \*Jefferson Patterson Park & Museum (including landings)
- \*MCIA
- \*Terrapin Creek
- \*Patuxent River Park
- \*Jug Bay
- \*Parkers Creek
- \*Cocktown Creek
- \*Hall Creek
- \*Calvert Marine Museum (blends human history with natural history)
- \*Note: Participants also noted the following sites as good places to "reach our audiences" – marinas, Wal-Mart stores, schools

**From Scotland, MD (Point Lookout State Park) meeting:**

- \*St. Clement's Island (colonization and shoreline change)
- \*View of Calvert Cliffs from Hooper Straits
- \*Point Lookout (Smith's Point—first voyage heading up the Potomac)

- \*Sotterley Plantation (tobacco economy, trade routes, environmental impacts of tobacco and grain - erosion associated with the growth of the grain economy)
- \*Port Tobacco (agricultural labor, including indenture, slavery and the role of African Americans)
- \*Sotterley Plantation—the water (microcosm of Bay history). *History tied to water location*. Sotterley is tied to the Native American story (seasonal use) and the African American story.
- \*Shell middens
- \*Piney Point
- \*St. Mary's River State Park

**From Onancock, VA meeting:**

- \*Onancock Creek
- \*Harbor towns (including creek towns, such as Onancock, all have stories of ferries, steamboat stops, etc.)
- \*System of creek (kayaking) trails
- \*Eastern Shore National Wildlife Refuge
- \*Delmarva Discovery Center
- \*Coastal Reserve Barrier Island
- \*The Eastern Shore

**From Accokeek, MD (Accokeek Foundation at Piscataway Park) meeting:**

- \*Fenwick
- \*Colonial sites
- \*Chapman State Park
- \*Mt. Vernon
- \*Leesylvania State Park
- \*Free Stone
- \*Mallows Bay (Ghost Fleet)
- \*Douglass Point (Bureau of Land Management)
- \*Occoquan water trail
- \*Mattawoman State Natural Environmental Area
- \*Charles County Rail Line (rails to trails project)
- \*Widewater State Park (under development)
- \*Mason Neck State Park
- \*Port Tobacco
- \*Friendship Park
- \*Namijoy
- \*Piscataway
- \*Fort Washington
- \*Oxon Hill
- \*Harmony Hall
- \*Broad Creek Historical District
- \*National Harbor
- \*National Children's Museum
- \*Old Gravel Pit

- \*Lyles House
- \*Historic St. Mary's City
- \*Old Town Alexandria
- \*Thomas Stone National Historic Site
- \*Mason Neck National Wildlife Refuge (eagle habitat)
- \*Note: (Area) Yacht Show was mentioned as a venue for reaching our audiences

**From Grasonville, MD meeting:**

- \*Rock Hall
- \*Terrapin Park (hard for visitors to find)
- \*Kent Island Cross-Island Trail
- \*Elk Neck State Park
- \*B & A Trail
- \*Galesville
- \*Queen Anne's County boat landings

**From Fredericksburg, VA (George Washington's Ferry Farm) meeting:**

- \*George Washington's Ferry Farm
- \*Caledon Forest
- \*Crow's Nest Forest near Stafford
- \*Belle Isle State Park
- \*Westmoreland State Park
- \*Sites of the three existing shallop replicas:
  - Reedville, VA
  - Deltaville, VA
  - Chestertown, MD
- \*Virginia Indian Heritage Trail
- \*Civil War trails

**From Seaford, DE meeting:**

- \*Chincoteague National Wildlife Refuge
- \*Blackwater National Wildlife Refuge
- \*Bombay Hook National Wildlife Refuge
- \*Nanticoke Indian Association Museum
- \*Trap Pond State Park
- \*Nanticoke Wildlife Area
- \*Byways: East-West Byway, Delaware Scenic Byway Program, Underground Railroad Scenic Byway
- \*Pocomoke River
- \*Phillips Landing
- \*Seaford boat ramp
- \*Seaford River Park
- \*Seaford River Walk
- \*Seaford canoe launch
- \*Conservancy hiking trails

- \*Woodland Ferry Landing ([www.woodlandferry.net](http://www.woodlandferry.net))
- \*Blades Marina at Nanticoke River
- \*Bethel (“Toy Village Come to Life” according to National Geographic)
- \*Old Christ Church, Laurel
- \*Ross Plantation (has slave quarters)

#### **4. Existing Visitor Opportunities**

Participants identified the opportunities that already exist for visitors and area residents in their areas.

##### Summary:

*Some meetings did not cover this topic extensively, but what comes through from the comments is that participants are enthusiastic about the various on-going activities and opportunities related to the themes and messages of the Trail. As with Best Places, Trail planners will be challenged to select the opportunities to use in promoting the Trail and connecting visitors with natural and cultural resources.*

##### Specific Comments:

- \*Participate in the CHESPAX program (environmental education).
- \*Visit the Native American Village at Jefferson Patterson Park & Museum (continuing public education).
- \*Attend the Flag Ponds’ (annual) Family Day on the Bay.
- \*Paddle park to park (American Chestnut Land Trust/Flag Ponds).
- \*Attend Patuxent River Appreciation Days.
- \*Take a lighthouse boat trip.
- \*Participate in the Lighthouse Challenge and visit a number of Bay lighthouses (during one weekend).
- \*Watch the War of 1812 reenactment at Jefferson Patterson Park & Museum.
- \*Visit sites on the Potomac River in Charles County and St. Mary’s County.
- \*Drive the “Religious Freedom Byways”—(colonists to Maryland used Captain Smith’s map).
- \*Visit the Piney Point Lighthouse, Museum and Historic Park (new maritime exhibit, environmental education, sustainable landscaping demonstration site).
- \*Be refreshed, educated, renewed and inspired.
- \*Experience quiet and serenity.
- \*Children on the Eastern Shore can go out to the islands, canoe, attend fishing clinics, visit the pond, scavenge on the beach, take field trips, visit the Delmarva Discovery Center (Pocomoke City) and the Coastal Reserve Barrier Island.
- \*Adults on the Eastern Shore can camp; do orienteering; attend Indian powwows; journal; “wildcraft” vegetation; paint, sketch and draw; attend the theatre; and learn cooking.
- \*Visit Atlantic beaches.
- \*Bicycle (2500 miles of roads) on the Eastern Shore.
- \*Picnic at Phillips Landing.
- \*Visit Bethel, Delaware to experience small town charm.

- \*Attend events: Nanticoke Powwow, River Fest, Shad Fest, Apple Scrapple, Punkin Chunkin, Muskrat Skinning, Delmarva Chicken Festival, and Woodland Ferry Festival.
- \*Visit Abbott's Mill (working grist mill).
- \*Get out on the water: Student's Mobile Canoe Program and Sultana Projects, Inc.
- \*Visit Old Christ Church's annual functions in Laurel, DE.
- \*Visit Ross Plantation.
- \*Go birding.
- \*See the fall colors.
- \*Go boating on the barge (Reedville), the 'Explorer' (Deltaville) and the Capt. John Smith shallop (Chestertown).
- \*Canoe or kayak the Nanticoke (approx. 32 miles) and the Rappahannock (the Capt. John Smith reenactment shallop crew named these rivers as ones that best depict the landscapes of 1600).

## 5. Potential Visitor Experiences

These are experiences the Captain John Smith Chesapeake National Historic Trail will work to provide. (In some cases for a greater number of people than experience them now.)

### Summary:

*Many comments reflect the participants' feelings: They love the land and water of the Chesapeake Bay region. They want others to experience what they experience and feel what they feel. They want people to get out on the water and get out on the land. They want people to observe wildlife. They hope these experiences will connect visitors to the history, cultures and environment of the Chesapeake Bay watershed. They hope these connections will inspire people to love the Bay as they do and work to preserve its land and waters.*

### Specific Comments:

- \*Experience the Bay/Trail by water (for those who would not ordinarily do so).
- \*Have universally accessible experiences of the land and water of the Chesapeake Bay.
- \*Experience the natural world as a family.
- \*Feel an immediate sense of welcome and belonging.
- \*Feel a sense of empowerment to protect and preserve the natural and cultural environment.
- \*Feel a sense of shock comparing the before and after [of the Chesapeake Bay] and be amazed at the abundance of resources seen by Captain Smith.
- \*Feel a spiritual connection to the environment. Have a personal spiritual experience.
- \*Return on a pilgrimage to one's favorite places from childhood.
- \*Connect to the continuity of the human experience on the Chesapeake. Feel empathy for historic cultures. Connect with one's ancestors.
- \*Relate to the ways the changes to the Chesapeake Bay affect our lives.
- \*Appreciate how Smith and his crew survived in the shallop.
- \*Understand the suffering the Bay is undergoing—the wildlife, etc.
- \****Adore the Bay.***

- \*Feel hope for the future of the Bay.
- \*Appreciate the knowledge and skills of those who navigate the Bay and those who build the boats.
- \* “*Think Green*”—engage in conservation and stewardship programs, such as developing rain gardens, using rain barrels, recycling, etc.
- \*Know where to report Bay conditions, spills, harmful activities, etc.
- \*Follow good boating ethics.
- \*Spend money—in the communities they visit (contribute to the local economies).
- \*Respect archeological sites and historic resources.
- \*Engage in outreach activities (as students and teachers in activities created/conducted by partners).
- \*Learn the unique stories about people’s relationship to Bay life such as “barrels o’ bullfrogs” and local folklore.
- \*Learn the importance of physical fitness.
- \****Get out of the car*** and have direct interactions and connections to the environment.
- \*Transform one’s perceptions of “swamps.”
- \*Enjoy contests such as “How many bald eagles do you see?”
- \*Attend festivals: Shad Festival (Vienna), Bald Eagle Festival (Blackwater National Wildlife Refuge), Waterfowl Festival, Outdoor Expo, Seafood Festival, Duck Calling Festival, Spring Bird Migration Festival, etc.
- \*Experience rare wildlife sightings (golden eagles at Blackwater NWR,) wildlife migrations and concentrations: rock fish (spawning,) snow geese, Canada geese, birds (esp. warblers) and butterflies.
- \*Go “gunkholing” (stopping and poking around to explore small creeks and coves).

## **6. Potential Trail Partners**

Participants suggested additional individuals, organizations and agencies in their region which could participate in the planning process and join as supporters of the Trail.

### Summary:

*By listing a wide range of potential trail partners, participants encourage the Captain John Smith Chesapeake National Historic Trail to actively reach out to a wide range of collaborators and supporters. These include business interests, both individuals and organizations (including those who directly supply outfitting and touring services); federal, state, county and municipal government entities (both their park and resource management offices and their planning and economic development offices); conservation organizations (from bird and garden clubs to riverkeepers, conservancy groups and the Audubon Society); and anglers and hunters.*

*The participants basically see as a potential partner any individual, group or government entity whose interest or business connects with the land and water of the Chesapeake Bay and its tributaries.*

### Specific Suggestions:

- \*Local service providers (will promote Trail and provide services)
- \*Outfitters in Solomons, Charles County and Fort Washington

- \*Phillip's Wharf
- \*Jim Rapp (D-Lite—Lower Delmarva Low Impact Tourism)
- \*Scenic Byways managers
- \*Terrapin Institute
- \*Riverkeepers, shorekeepers, and watershed keepers
- \*Eastern Shore Land Conservancy
- \*Horn Point
- \*Gateways/Heritage Areas
- \*National wildlife refuges (U.S. Fish and Wildlife Service)
- \*Municipal Parks Departments/City Parks
- \*Maryland Department of Natural Resources
- \*Economic development offices and boards of economic development
- \*Nonprofits—Vienna Heritage Group
- \*County Planning and Zoning offices
- \*Tourism directors
- \*City, local and regional tourism offices (Southern Maryland Travel and Tourism)
- \*Shopkeepers (“Go to them with Trail information.”)
- \*Hotel/motel receptionists and clerks
- \*Innkeepers
- \*Patuxent Naval Air Station
- \*Patuxent partnership consortium
- \*Private businesses
- \*Science labs—Chesapeake Biological Laboratory
- \*Colleges
- \*Garden Association of Virginia
- \*Maryland Native Plant Society
- \*Garden clubs in Maryland and Virginia
- \*Consortium of trails
- \*Catboat Association (nationwide)
- \*Publishers (back country boating guides, features in monthly magazines, Cruising Chesapeake Bay annual guide)
- \*Maryland and Virginia state departments of education
- \*Delmarva Discovery Center (Brian Garrett)
- \*Shorekeeper (David Burton)
- \*Coastal Zone Management/Department of Environmental Quality (Virginia Witmer)
- \*Boat U.S. Foundation
- \*Shaw Tours (pre-packaged, low impact)
- \*Anglers
- \*Hunters
- \*Ducks Unlimited
- \*Town of Bethel, Delaware
- \*Town of Blades, Delaware
- \*Nanticoke Tribe
- \*Woodland Ferry Association
- \*Sussex Chapter of the Archeological Society of Delaware
- \*Sussex Bird Club

- \*Nanticoke River Conservancy
- \*Nature Conservancy (has holdings on the Nanticoke River)
- \*Conservation Fund
- \*Audubon Society
- \*Delaware Bass Federation (has a bass fishing tournament on the Nanticoke River)
- \*Delmarva Ornithological Society
- \*University of Delaware Sea Grant Program (doing tourism impact study)
- \*Delaware Division of Parks and Recreation
- \*Delaware Division of Fish and Wildlife
- \*Alice Ferguson Foundation
- \*National Harbor business people
- \*Friends groups
- \*Local land trusts
- \*Senior citizen groups
- \*Restaurants and business associations
- \*Friends of the Rappahannock
- \*West Marine Foundation
- \*Virginia Department of Tourism
- \*Chickahominy Water Trail
- \*Tour Boat Operators (e.g. Watermark)
- \*Baltimore Harbor
- \*Chesapeake Bay Paddling Association
- \*Bass fishermen
- \*Boat builders (Chesapeake Light Craft, Chesapeake 20 Association)
- \*Tilghman Island Watermen
- \*Chesapeake Bay Maritime Museum
- \**Prop Talk* publication
- \**Spin Sheet* publication
- \*WNAV 1430 AM – weekly boaters’ show
- \*Conservationists and preservationists who are restoring shad to the rivers, adopting wetlands and saving grist mills
- \*Other Gateways Network sites, connector routes and Regional Information Centers

## **7. Early Implementation Strategies**

Participants identified actions that could be taken to engage visitors and partners while the Trail is being developed.

### Summary:

*The participants’ two main ideas are to reach out to people and get the Trail’s message out there. The participants’ watchwords are: Produce, Publicize and Make Connections. They urge the planners involved with the Captain John Smith Chesapeake National Historic Trail to produce information to communicate to partners and actual/potential visitors, to publicize the successes and messages of the Trail, and to make connections with potential public and private partners.*

*People at the meetings are thinking big. They are optimistic that people will be receptive to the Trail's messages. They are confident that there are many connections to be made.*

*They would like the Captain John Smith Chesapeake National Historic Trail to create an identity and get out there and be known.*

*They also want help from the Captain John Smith Chesapeake National Historic Trail planners in training and in guiding their own efforts.*

*The task of planners and managers will be to decide where to put the time, energies and efforts to implement these ambitious ideas.*

Specific Suggestions:

- \*Establish core themes and messages.
- \*Provide training on how to connect and weave the stories.
- \*Provide information to satisfy general visitor needs: overview, directions/maps/distances, points of interest, photos, accommodations, hours of operation, fees, websites, activities, facilities, accessibility, regulations regarding pets, safety tips, Trail etiquette, access to weather reports and contact numbers and addresses.
- \*Produce simple, highly visual media celebrating "small successes" as new projects are developed, maintaining a positive, motivational tone.
- \*Develop a slide program for partners to show while garnering support for Trail-related projects.
- \*Create kayak launch points and publicize them.
- \*Build and strengthen partnerships to create synergy and pool resources to obtain money, partner on grants and spread the financial burden among agencies and organizations.
- \*Hold off-season meetings and seminars to provide content training, interpretive training, and inform implementers. These can be packaged seminars and presentations, information kits for partners (no dismal messages or bullets/lists) and ideas for communities to get involved. **"Inspiration is more important than instruction."** Instruction can be generic with a supplement for the local audience. Provide training on how to use equipment. Use the Internet to communicate.
- \*Engage municipalities to communicate and work together for heritage tourism.
- \*Inform the news media about new projects being developed and significant advancements in the development of the Trail through local newspapers, Maryland Public Television, radio, public access channels and local community access channels.
- \*Produce canned pieces for partners.
- \*Publicize during 2008 celebration.
- \*Publicize through the Chesapeake Bay Gateways Network.
- \*Contact boards of economic development for help. Hold summit conferences with the Chesapeake Bay Gateways Network and economic development partners.
- \*Begin branding the Captain John Smith Chesapeake National Historic Trail product.
- \*Brainstorm the existing programs and sites. Conduct networking meetings.
- \*Create a "Coming Soon" sign.
- \*Develop a logo sign indicating "You are here."
- \*Create Trail "segments."
- \*Connect with local festivals (Harbor Fest)—collect history information at a booth (stories of the Bay).

- \*Collect stories: Conduct a “Send Your Story” contest. Contact Story Corps to bring them in to collect stories. (Jim Fawcett—stories on National Public Radio.) Ask people to contribute stories, photographs, Old Bay and other specific labels, videos, music. (Record the storyteller Steve Darby.) Highlight a “Story of the Month” on the website. Features could be of people who do the entire Trail or from the shallop tour archive and the shallop crew (Sultana Projects, Inc. or the Deltaville and Reedville shallops).
- \*Teach people how to run canoe programs. (There are not enough outfitters.)
- \*Create a “Walk through the Woods” marsh tour.
- \*Get people out on the water and help them feel comfortable.
- \*Create water-connected experiences for non-canoeists.
- \*Create “umbrella programs” for the Trail: safety programs, introduction to the Water Trail for kids, as well as standardized programs.
- \*Identify those things that “Help Make This Place Special.”
- \*Incorporate use of Chesapeake Bay icons
- \*Create identities as CAJO-select communities.
- \*Establish the Nanticoke River Water Trail (recently nominated into the Gateways Network).
- \*Contact travel writers to get articles and stories in print (e.g. *Outdoor Delaware* and other outdoor magazines).
- \*Develop a Captain John Smith Trail guide for each river.
- \*Create an online teachers’ seminar, especially for summer months.
- \*Create a design system, a look and an identity to tie together. Create this virtually before we build it realistically.
- \*Create a synergism by linking to thematically-related sites.
- \*Create “boiler-plate” press releases that other sites can use.
- \*Develop a prototype program for each of the three thematic areas that could be used at multiple sites.
- \*Create a baseline and a process for measuring success. Have a business mind. Keep records of visitors. Encourage sites to think strategically.
- \*Get quality information to outfitters and tour operators
- \*Direct people to places that remind us how the landscape and the Bay were in the past, e.g. Tuckahoe River and Tuckahoe State Park.
- \*Integrate Captain John Smith Chesapeake National Historic Trail with the national trail program.
- \*Develop ways to tie interpretation to water based experiences with in-depth guides, paddling guides to St. Leonard’s Creek and other ways to interpret from the water. Tap into the marina populations and boat clubs (Cruising Club of the Chesapeake). Place interpretive panels in marinas. Develop landings at Jefferson Patterson Park & Museum. **“Connect people through the waterways. Return to the old ways.”** Elder hostel boat tours. Patuxent and Potomac rivers tour packages.
- \*Develop a program coordinating scouting events/hikes/paddles/orienteering with patches/medals.
- \*Develop additional events tracing Captain Smith’s voyages.
- \*Broaden the programming of the Skipjack Lab of the Chesapeake Biological Laboratories.

\*Encourage geocaching (using GPS devices to find “caches” at predetermined sites) at St. Mary’s River State Park and Point Lookout State Park. (This will require an agreement from the Maryland Department of Natural Resources.)

\*Develop kayak and canoe historic tours (Annapolis Maritime Museum has initiated this).

\*Weave CAJO content into Ingleside Winery Tours.

\*Develop skiff tours, e.g. Calvert Marine Museum to Jefferson Patterson Park & Museum. (Note: insurance an issue. Check National Park Service support program.)

\*Encourage Heritage Boat Tours (visit sites from water), e.g. Watermark Tours.

## **8. Interpretive Media**

Participants recommended the types of media they thought would effectively reach visitors.

### Summary:

*Recognizing the nature of the Captain John Smith Chesapeake National Historic Trail, participants recommended that media be developed to reach out to visitors, potential visitors and local residents. Websites, cell phone tours, school curriculums, road signs, buoy system panels, NOAA’s Chesapeake Bay Interpretive Buoy System, guidebooks, radio broadcasts, offsite films and Regional Information Centers were recommended to communicate to people where they were. Conventional media such as films or indoor or outdoor exhibits requiring on-site visitor centers were not recommended.*

*By their comments, participants tacitly acknowledge that people would not be likely to come to the Trail until media promotions and Trail interpretation reached people where they are.*

*The participants’ creative suggestions for utilizing the latest in electronic media acknowledged the need to contact the greatest number of people with the most efficiency.*

*Again, planners and managers will have to carefully evaluate these and other ideas for interpretive media to get the most out of the available resources of people and money.*

### Specific Suggestions:

\*Create websites to communicate information about Trail resources, including contact information, interpretive programs, special events and other Trail sites in the region.

\*Create a website based “Captain John Smith Survivor” interactive experience.

\*Develop websites that allow visitors to create their own itineraries. Identify sites thematically (e.g. historic church tours, crafters around Chesapeake Bay) and by types of experience (walking, water-based, driving, etc.).

\*Present excerpts from John Smith’s journals.

\*Integrate Trail information into school curriculums with learning objectives that match state/county guidelines.

\*Present information about the geography and mapping of the Chesapeake Bay.

\*Use art to express a connection to the immediate environment.

\*Engage in pre- and post-experience testing/evaluation activities.

- \*Present timelines of how sites/communities evolved in the context of major events/developments in national history.
- \*Show changes in the Bay shoreline with a diorama of Calvert Cliffs that dissolves into the present shoreline.
- \*Develop cell phone tours and wand tours.
- \*Develop road signs, design placemats for restaurants (with local sites) and advertise on Wal-Mart bags.
- \*Capitalize on components in common with other trails and heritage areas.
- \*Place signage at creek crossings.
- \*Develop public service announcements.
- \*Put John Smith on a milk carton.
- \*Utilize the buoy system panels to communicate information.
- \*Develop a **Bay Passport/Passbook** (will evolve with the Trail). Connect to sponsor such as Scott's Fertilizer or other companies (connect to something that tells a story).
- \*Develop podcasts for people to download.
- \*Develop a "Hiking Spree" program with awards and patches, similar to the Lighthouse Challenge.
- \*Live interpretation (broadcasts?).
- \*Update site interpretive tools and improve techno infrastructure with the Trail network (and CBGN) serving as a clearing house. Use CBGN grants for CAJO.
- \* Link sites to the **NOAA Chesapeake Bay Interpretive Buoy System**. The CBIBS provides real-time data streams (live information) on weather and water quality via wireless technology. The CBIBS also provides interpretation of portions of the Captain John Smith Chesapeake National Historic Trail. The interpretive buoys could provide historical, seasonal and geographic information as well as information for anglers. Tie land-based electronic kiosks to buoy locations. Kiosks can print out maps. Visitors can follow the Trail virtually. Provide 3-dimensional visualization of the bottom. Tie to ADC charts; provide GPS downloadable maps. Show shoreline island changes. Tie to GoogleEarth and NASA Landsat images. Connect to satellites. Transmit underwater webcam images. (The CBIBS is accessible by telephone: 1-887-Buoybay.)
- \*Encourage kayakers and canoeists to log on to the CBIBS, pulling in Verizon as a partner.
- \*Provide **pre-packaged experiences (Activity Packages)** providing prepackaged agendas.
- \*Show then and now images (such as the historic oyster piles vs. today's harvest) to convey the loss of resources of Chesapeake Bay. Use historical photographs to tell stories. Describe accurately and depict "then and now."
- \*Develop a guidebook (like a "Lonely Planet" guide) for CAJO or "CAJO for Dummies."
- \*Create a guide to the story of the tribes that is interpreted by tribal members.
- \*Provide information to Wikipedia.
- \*Films, especially for young people, can show historic images of places that no longer exist or images of sites that are too sensitive to open to public access.
- \*Develop a boater's guide (what there is to see, where the places are to visit, provide history from the water perspective, provide seasonal information and interpretation).

- \*Develop “Create Your Own Itinerary” guides: e.g. historic churches; experience-based activities; food tours (examples: “Culinary Delights,” interesting local foods, Shad Festival in Vienna, Virginia); Indians (Lore and Landings).
- \*Develop a series of regional maps and guides, e.g. James River Water Trail and Chesapeake Country.
- \*Develop more Regional Information Centers (RICS).
- \*Provoke people to learn more about the Bay and its history.
- \*Provide opportunities for local residents to understand the Bay and its environs.

## 9. Miscellaneous Considerations

This category captures statements and ideas by participants which express additional visions they have for the Captain John Smith Chesapeake National Historic Trail.

*Many of the comments in this miscellaneous category feature the word “experience.” Participants see the Trail as a deep, inclusive, memorable experience for visitors. One person envisioned this experience lasting a week rather than the one day people spend at most sites. Participants see this rich, conscious experience as creating in visitors a feeling of stewardship and responsibility for the Bay environment. Through their comments, participants recognize the value and significance of the Chesapeake environment and its ability to cast a spell on visitors.*

*Comments of the Accohannock Indians reflect a deep wish that their story be told in a real way. They cautioned that their story is not the same story as that of Indians from Maryland, Delaware and other parts of Virginia. Each tribe has its own culture and story to tell.*

- \*Visitors will understand the site-specific ethics for visiting sensitive resources that are open to the public.
- \*The Captain John Smith Chesapeake National Historic Trail could be seen as the maritime equivalent of the Appalachian Trail.
- \****Lead visitors towards “deeper” aesthetic, intellectual and spiritual experiences at sites and along segments of the Trail***, while encouraging low-impact interactions that are steeped in a conservation stewardship ethic.
- \*From Point Lookout State Park meeting: Decline in sports fishing will bring changes to the experience economy (charter captains conducting water tours) and tourism, e.g., Capt. Phil Langley. Trail will encourage this activity, e.g. Smith and Jetland creeks, multiple routes, mini-routes. Greg Majeski and Jack Russell interpret on the water. Boat to St. Clement’s Island is a water trail experience. This will need to be marketed. Don’t want signage clutter. Special events are okay.
- \*CAJO/CBGN conundrum. Trails tie to gateways. Gateways provide infrastructure.
- \**Visitors need a “concierge” to orient them to what is available in the area.*
- \*Trail does not have to be entirely on water.
- \*Encourage longer stays of up to a week (not the one-night stays of most visitors).

- \*Be conscious of **carrying capacity** of sites in promotion, e.g. Kiptopeke State Park is near maximum carrying capacity in peak season.
- \*Promote **low-impact** experiences.
- \*Initiate a **Pledge Program for Stewardship**. Promote “CAJO-friendly 1608” plants. Connect history and stewardship. Promote **Native Plant alternatives**.
- \*Some sites may resist expanding their message—financial strain, difficulty of change, diluting their message, relevance.
- \*Feature all four seasons in promotional media.
- \*Brand this project—a value proposition. (Total is a sum of its parts.) The brand promises a particular experience; an experience with things linked or tied together. Various elements will serve as “spokes of the wheel.”
- \*Pitch the area as a truly unique **American experience**—the very first American “product.”
- \*Reach the health-conscious audience with information on biking/jogging, etc.
- \*Ensure the “past stays present.” Don’t overwhelm people with past history.
- \*Find out what works and stick with it.
- \*Focus on educating the next generation.
- \***Dial in the residents, as well.** They need to buy-in to the Trail.
- \*People who are already coming here may not be the ones who need to be educated about the Bay.
- \*Potential slogans: “Come, enjoy—leave your money—go home.” “Chesapeake Bay—Land of Pleasant Living—Take Care of It.”
- \*Generation Y seeks action-oriented opportunities. (A “reality experience,” as those being developed at Accohannock Village, where visitors can live as the Indians’ ancestors did.)
- \*Recommended contacts (from Onancock meeting): Frances Latimer, historian (published book on historic African American sites on the harbor); Miles Barnes, historian; David Whitehurst; and Bill and Mary Burnham, authors of a guide to kayaking the Florida Keys (their next project is Chesapeake Bay. They are returning to area in March, 2008.).
- \*The development of the conservation effort to preserve the Mount Vernon viewshed was enormous and intensive. The result is preservation of an ecosystem that would otherwise have been developed. This story is not known beyond the local area.

### **Tribal Perspectives** (from Onancock meeting):

- \*There were differences between Maryland, Delaware and Virginia Indians. The Virginia tribes had different experiences.
- \*Educate the public about the Accohannocks’ existence, identity and experience.
  - The tribes took the brunt of first contact with Europeans.
  - Tell the story of the Eastern Woodland Indians.
  - Tell the “**True Story.**”
  - “**Old and young people are hungry to know where they come from.**”
  - What occurred in the past cannot be brought back.
  - What we do in the future is subject to modification
  - Farmers and watermen are declining (can’t make a living).

- We need to build a “product” (tourism) and find ways to make a living from it.
- “*This area will never be industrialized.*”
- Indians do not want a “*two-hour program.*”
- Create a guide interpreted by the tribal members.
- Educate the locals about the future. “***We’ve got to move forward and ‘forget the past.’***”
- Separate Indian communities have acted differently and will continue to do so.
- Elders suffered the consequences of segregation.
- Both sides have to be heard.
- “***Move forward from commonalities.***”
- Get people to feel the Indian people’s experience in a certain region—where they live, what they trap, etc.
- Need to know how the needs (of the Indian people) will be incorporated into the future.
- “***Our history began long before Virginia was a territory.***”
- Western Shore vs. Eastern Shore history: developed differently, Eastern Shore tribes were not affected by Powhatan, the power structure was based on different tribes and the pattern of European colonization was different. The tribes were interrelated, even though there were geographic differences.
- “Naturals” was Captain Smith’s name for the locals.

**CAPTAIN JOHN SMITH CHESAPEAKE NATIONAL HISTORIC TRAIL**

**INTERPRETIVE PLANNING MEETINGS 2007-08**

<b>Friday, September 7</b>	<b>Jamestown, VA</b>
<b>Wednesday, September 26</b>	<b>Baltimore, MD</b>
<b>Thursday, September 27</b>	<b>Havre de Grace, MD</b>
<b>Wednesday, December 12</b>	<b>Cambridge, MD (Cambridge Town Hall)</b>
<b>Wednesday, January 23</b>	<b>Prince Frederick, MD (Battle Creek Cypress Swamp)</b>
<b>Tuesday, January 29</b>	<b>Scotland, MD (Point Lookout State Park)</b>
<b>Thursday, January 31</b>	<b>Onancock, VA (Town Council Chambers)</b>
<b>Tuesday, February 5</b>	<b>Accokeek, MD (Accokeek Foundation @ Piscataway Park)</b>
<b>Wednesday, February 13</b>	<b>Grasonville, MD (Hilton Garden Inn)</b>
<b>Tuesday, February 26</b>	<b>Fredericksburg, VA (George Washington's Ferry Farm)</b>
<b>Thursday, March 13</b>	<b>Seaford, DE (Seaford Historical Society Museum)</b>

**CAPTAIN JOHN SMITH CHESAPEAKE NATIONAL HISTORIC TRAIL  
INTERPRETIVE PLANNING MEETING**

**QUESTIONS TO REVIEW PRIOR TO THE MEETING**

The over-arching goal of the trail is to foster citizen stewardship of the Chesapeake Bay. The three primary subject areas for interpretation are:

- Smith's voyages around the Bay
- The natural environment of the Bay (then and now)
- Native American culture and society (then and now)

In relation to the above-mentioned subjects:

1. What **key stories** should be highlighted in your region?
2. What are the **best places** for access to the Bay and Bay-related resources?
3. What **\*visitor opportunities** already exist in your region?
4. What **additional visitor experiences** (on land and on the water) should we strive to provide?

Please help us with the planning process:

1. Are there any **additional organizations** in your region we should involve in the interpretive planning process?
2. What **early implementation actions** do you recommend we take to engage visitors while the trail is being developed?
3. Do you have suggestions re: the **types of media** we should use to effectively reach visitors?

**\*Note:** For our purposes, the term "visitors" refers to area residents as well as tourists.

## **SAMPLE MEETING AGENDA**

### **CAPTAIN JOHN SMITH CHESAPEAKE NATIONAL HISTORIC TRAIL PLANNING MEETING THURSDAY, JANUARY 31, 2008**

#### **AGENDA**

12:45pm – 1:00pm	Check-in & Refreshments
1:00pm – 1:30pm	Welcome & Introductions Overview of Interpretive Planning Effort
1:30pm – 3:00pm	Goals of the Meeting Highlight Key Stories in the Region Identify Best Places for Access & Interpretation Inventory Existing Visitor Opportunities Brainstorm Potential Visitor Experiences
3:00pm - 3:30pm	Identify Potential Partners Ideas re: Early Implementation
3:30pm – 4:00pm	Wrap-up & Evaluation

(Note: Breaks will be woven into the agenda as determined by the group.)

**Purpose of the Trail:** The Captain John Smith Chesapeake National Historic Trail commemorates the explorations of Captain Smith on the Chesapeake Bay and its tributaries from 1607-1609, in association with the founding of Jamestown, the first permanent British colony in North America. It recognizes the American Indian towns and cultures of the 17<sup>th</sup> century, calls attention to the historic and contemporary natural history of the Bay, complements the Chesapeake Bay Gateways and Watertrails Network, and provides new opportunities for education, recreation, and heritage tourism in the Chesapeake Bay region. In providing a focus on and appreciation of the resources associated with Smith's voyages, the trail will help to facilitate protection of those resources.

## APPENDIX D:

### TRAIL-RELATED RESOURCES

Note: Appendix D is reprinted from the *Captain John Smith Chesapeake National Historic Trail Feasibility Study and Environmental Assessment (July 2006)*. The trail-related resources appear in the study as Appendix C. The author is Project Historian John S. Salmon.

In the table on the following pages, the blue-shaded rows list John Smith's 1608 voyage stops as they are described in the draft book "John Smith's Chesapeake Voyages 1607-1609", by Helen C. Rountree, Wayne E. Clark, and Kent Mountford (draft February 1, 2005). The 1608 date is shown in the leftmost column and the place name in the second column.

- Note that according to the book, the meaning of the term "stop" varies considerably. At some stops, the boat landed and the crew disembarked to walk and explore the land, or to meet with native people living there, or to camp for the night. Some stops were merely an anchoring in a sheltered bay for one or more nights, without touching land. Some stops were not stops in the usual sense but merely a water-based exploration of a particular bay or creek before moving on.
- Note also that the naming of stops varies; some are modern-day place names; some are names of Smith's time, either names he assigned or tribal names. When known, 1608 names are italicized, unless the name has remained the same to the present time.
- Note also that information on Smith's Potomac River exploration is much sketchier and no dates are known.

Therefore the "stops" are labeled according to geography rather than the date, and the "Map ID Number" is merely a number preceded by the letter "P" for Potomac.

Under each stop name, the white rows (indented) list any nearby federal, state or local public lands (as well as a few privately owned sites that may be open to public use). This includes National Parks, National Wildlife Refuges, National Wildlife Management Areas, state and local parks, municipal boat ramps, etc. These are considered potential resources to support the proposed trail.

The columns to the right of each of these indicate whether the resource provides restrooms, parking, public access to the water, and whether the site offers potential to provide information about and interpretation of the proposed John Smith trail.

The federal and state lands are shown on the inset maps, Maps 3 through 7. The boat ramps are shown on Map 11.

The final four pages of the table provide a list of Chesapeake Bay Gateway sites in proximity to the proposed trail routes, Voyage 1 and Voyage 2, with information about facilities and interpretation potential. These sites are listed not shown relative to voyage stops, but this may be seen on Maps 3 through 7.

Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/Proposed Water Trails
<b>JOHN SMITH VOYAGE I: JUNE 2 -- JULY 21, 1608</b>									
6.2:1	Cape Henry (left supply ship for barge)								
	First Landing State Park	Virginia Beach, VA	✓	public	✓				
6.3:1	Cape Charles								
6.3:2	Lower barrier islands								
	Smith Island	Northampton, VA		private					
	Mockhorn? WMA	Northampton, VA		public	trails				
6.3:3	Fisherman's Island								
	Fisherman's Island? NWR	Northampton, VA		public				FWS	
6.3:4	Accomack	Northampton?, VA							
6.4:1	Cherrystone Inlet								
	Cape Charles Public Beach	Northampton, VA	✓	public	swim, bank fish				
6.4:2	"either Nassawaddox [modern name] or Occohannock Creek"	Northampton?, VA		private					
6.4:3	Chesconnessex Creek								
	near Parkers March Natural Area	Accomack, VA	✓	public			✓		
6.5:1	Watts and Tangier Islands ( <i>Russel's Isle</i> )			public / private	✓	✓	✓		SSBT
6.5:2	Beasley Bay								
	Saxis WMA	Accomack, VA	✓	public	✓		✓		SSBT
6.5:3	First downriver town on the Pocomoke, <i>Wighcocomoco</i>								
	Shelltown Boat Ramp	Somerset	✓	public	✓		✓		
	Pitts Creek Landing	Accomack, VA	✓	public	✓		✓		
6.5:4	Pocomoke City								
	Laurel Street Boat Ramp	Worcester, MD	✓	public	✓		✓		

\* Italics indicates place name as recorded by John Smith

Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/Proposed Water Trails
6.10:2	Up the Nanticoke, past the village <i>Nantaquack</i> , near modern Rabbit Town [this text & the next may be changed in Delaware revision]								
6.10:3	Chief's town of <i>Cuskarawaok</i> [ <i>Kuskarawaok</i> on map] near present-day Federalsburg								
6.11:1	Nancy Point ( <i>Momsfords Point</i> ) on Lower Hooper Island (private island) (text goes on but doesn't mention landing)								
6.11:2	Between Fishing Creek and Randle Cliff								
	near town of Chesapeake Beach, Calvert County -- look up								
6.12:1	Herring Bay	Anne Arundel	all private land						
6.12:2	the mouth of the South River								
	Mayo Beach Park					✓	✓		
	Thomas Point Park	Anne Arundel	✓	public		✓	✓		
6.12:3	the Magothy River at least to Sillery Bay		private land around bay						
6.12:4	the mouth of the Patapsco River at Old Road Bay								
	Fort Smallwood	Anne Arundel, MD	✓	public	✓	✓	✓		SSBT
	Fort Howard	Baltimore County, MD	✓	public		✓	✓		SSBT
6.13:1	the modern port town of Elkridge								
	Patapsco Valley State Park	Anne Arundel, MD	✓	public			✓		
6.13:2	the first falls of the Patapsco near where I-95 crosses it today, a place he named ' <i>Downs Dale</i> '	Anne Arundel, MD	✓	public			✓		
6.14:1	mouth of Patapsco, the tidal basin in what is now Baltimore								

\* Italics indicates place name as recorded by John Smith

Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/Proposed Water Trails
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6.11:2	Between Fishing Creek and Randle Cliff								
	near town of Chesapeake Beach, Calvert County -- look up								
6.12:1	Herring Bay	Anne Arundel	all private land						
6.12:2	the mouth of the South River								
	Mayo Beach Park					✓	✓		
	Thomas Point Park	Anne Arundel	✓	public		✓	✓		
6.12:3	the Magothy River at least to Sillery Bay		private land around bay						
6.12:4	the mouth of the Patapsco River at Old Road Bay								
	Fort Smallwood	Anne Arundel, MD	✓	public	✓	✓	✓		SSBT
	Fort Howard	Baltimore County, MD	✓	public		✓	✓		SSBT
6.13:1	the modern port town of Elkrigde								
	Patapsco Valley State Park	Anne Arundel, MD	✓	public			✓		
6.13:2	the first falls of the Patapsco near where I-95 crosses it today, a place he named ' <i>Downs Dale</i> '	Anne Arundel, MD	✓	public			✓		
6.14:1	mouth of Patapsco, the tidal basin in what is now Baltimore								

\* Italics indicates place name as recorded by John Smith

Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/Proposed Water Trails
	Fort Howard Park	Baltimore County, MD	✓	public		✓	✓		
	North Point State Park	Baltimore County, MD	✓	public		✓	✓		
6.15:1	Herring Bay	Anne Arundel, MD	all private land						
6.16:1	Cornfield Harbor								
	Point Lookout State Park	St. Mary's, MD	✓	public	✓	✓	✓		
6.16:1	Nomini Creek	Westmoreland, VA	all private						
	LOWER POTOMAC, ascending the river. "It is more difficult to reconstruct John Smith's chronology after his stay in Nomini Bay, for he covers four weeks' explorations in a relatively few pages . . . without indicating times or sequences. Therefore at this point we shall switch from accounts of separate days to accounts of separate areas of the Potomac valley, and the map stops will be labeled according to geography rather than the date. "								
P.1	the <i>Yeocomico</i> River and the chief's town of <i>Cecomocomoco</i> (Wicomico River, MD)								
	Bushwood Wharf Recreation Area	St. Mary's, MD	✓	public	✓	✓	✓		Potomac River Water Trail, PHT, SSBT
P.2	the <i>Potopacos</i> on the Port Tobacco River								
	Chapel Point State Park	Charles, MD	✓	public	✓		✓		PRWT, PHT, SSBT
P.10	Pomacocack village, Nanjemoy Creek [a landing?]								

\* Italics indicates place name as recorded by John Smith

Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/Proposed Water/Trails
	Friendship Landing	Charles, MD	✓	public	✓		✓		"
P.3	the Nanjemoys (map says only <i>Nussamek</i> at P.3)								
	near Purse State Park	Charles, MD	✓	public	✓		✓+ RR		"
P.4	"receiving a friendly welcome from the <i>Tauxenents</i> ('Toags,' or <i>Dogues</i> )" [landing]								
	Occoquan National Wildlife Refuge	Fairfax, VA	✓	public	✓	✓	✓	FWS	"
	Featherstone NWR	Fairfax, VA		public				FWS	"
	Leesylvania State Park (Gateway)	Prince William, VA	✓	public	✓	✓	✓		"
	Mason Neck NWR	Fairfax, VA	✓	public				FWS	"
	Mason Neck State Park (Gateway)	Fairfax, VA	✓	public	✓	✓	✓		
P.5	Moyaone (Piscataway) [spelled <i>Mayaons</i> on map]								
	Piscataway Park (Gateway)	Prince Georges, MD	✓	public	✓	✓	✓	NPS	PRWT, PHT, SSBT
	Fort Washington Park	Prince Georges, MD	✓	public	✓	✓	✓	NPS	
P.6	Nacotchtank -- into Anacostia River	Washington, DC							
	Anacostia Park	Washington, DC						NPS	"
	Washington Navy Yard	Washington, DC							"
P.7 (P.11 i)	the Little Falls of the Potomac, a mile above the boundary of modern Washington, DC	VA / MD	✓	public		✓	✓	NPS/regional park	
	Chesapeake & Ohio Canal							NPS	
	George Washington Parkway							NPS	
P.11.2	Surrounding area of Aquia Creek or perhaps Beaverdam Creek, calling it <i>Sparks Valley</i> . ( <i>Qwyough</i> on map)								
	Acquia Landing Park (County Park)	Stafford, VA		public	✓	✓	✓		
P.12	the town of <i>Ozatawomen</i> on Upper Machodoc Creek" [spelled <i>Ozmawomen</i> on map]	King George, VA		private					

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Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/Proposed Water Trails
	U.S. Naval Reservation, Dahlgren Weapons Laboratory	King George		restricted					
P.13	St. Clements Bay (P.12 in text, P.13 on map)								
P.15	the <i>Sekakawons</i> on the Coan River" [spelled <i>Cekamowen</i> on map]								
7.15:1	Wiccocomico on the Great Wicomico River (different spelling from map); appears to be on the Little Wicomico??				✓		✓		
7.15:2	the out-lying village of Conquack; appears to be on the Great Wicomico??								
7.16:1	Dividing Creek								
	Hughlett Point Natural Area	Northumberland, VA					✓		
7.16:2	Fleets Bay (south shore)	Northumberland, VA		all private land					
7.17:1	the mouth of the Rappahannock	Middlesex, VA							
	Windmill Point (across mouth of river from Stingray Point)	Lancaster, VA					✓		
7.18-19:1	(rounded Old Point Comfort and) put in at Kecoughtan								
	Fort Monroe	Hampton, VA (not a county?)		military					
7.20:1	Warraskoyack, near modern Smithfield (on Pagan River??)			private, no public access					
7.21	Jamestown (end of voyage)								

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<b>JOHN SMITH VOYAGE 2: JULY 24 -- SEPTEMBER 7, 1608</b>									
7.27:1	Stingray Point	Middlesex, VA	no public access; across river is Windmill Point, see 7.17						
7.28:1	Cove Point	Calvert, MD							
	Calvert Cliffs State Park, nearby		✓			✓	✓		SSBT
7.29:1	Old Road Bay								
	Fort Howard Park	Baltimore County, MD	✓			✓	✓		SSBT
7.30:1	past Turkey Point into the larger opening of the Northeast River								
	Elk Neck State Park	Cecil, MD	✓			✓	✓		
	Charlestown Pier	Cecil, MD	✓		✓		✓		
7.31:2	along the high cliffs east of Howell Point ("Pisings Point") or just past the cliffs, in the lower ground near Betterton								
	Betterton Beach Waterfront Park	Kent, MD	✓		✓	✓	✓		
8.1:1	the Sassafras ( <i>Toghwogh</i> ) River, village of the Tockwoghs (probably on the headland jutting out the farthest on the south side)								
	Sassafras River Natural Resource Mgmt Area	Kent, MD	✓	public, state owned			✓		
8.2:1	up the Susquehannock River to the head of tide at "Smith's Falls"								
	Susquehanna State Park	Harford, MD	✓		✓	✓	✓		
8.2:2									
8.2:3	Susquehanna Flats								
8.3:1	the head of the Elk River		private land						

\* Italics indicates place name as recorded by John Smith

Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/Proposed Water Trails	
<b>JOHN SMITH VOYAGE 2: JULY 24 -- SEPTEMBER 7, 1608</b>										
7.27:1	Stingray Point	Middlesex, VA	no public access; across river is Windmill Point, see 7.17							
7.28:1	Cove Point	Calvert, MD								
	Calvert Cliffs State Park, nearby		✓			✓	✓		SSBT	
7.29:1	Old Road Bay									
	Fort Howard Park	Baltimore County, MD	✓			✓	✓		SSBT	
7.30:1	past Turkey Point into the larger opening of the Northeast River									
	Elk Neck State Park	Cecil, MD	✓			✓	✓			
	Charlestown Pier	Cecil, MD	✓		✓		✓			
7.31:2	along the high cliffs east of Howell Point ("Pisings Point") or just past the cliffs, in the lower ground near Betterton									
	Betterton Beach Waterfront Park	Kent, MD	✓		✓	✓	✓			
8.1:1	the <i>Sassafras (Toghwogh)</i> River, village of the Tockwoghs (probably on the headland jutting out the farthest on the south side)									
	Sassafras River Natural Resource Mgmt Area	Kent, MD	✓	public, state owned			✓			
8.2:1	up the Susquehannock River to the head of tide at "Smith's Falls"									
	Susquehanna State Park	Harford, MD	✓		✓	✓	✓			
8.2:2										
8.2:3	Susquehanna Flats									
8.3:1	the head of the Elk River		private land							

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	Elk Neck State Park is downstream; see 7:30.1								
8.8:1	Village of Ozinies, Swan Point, Rock Hall Bay								
	Spring Cove Public Landing	Kent, MD	✓	public	✓		✓		SSBT
8.9:1	Cleared Love Point at the northern tip of Kent Island								
	Terrapin Nature Park	Queen Anne's, MD	✓			✓	✓		SSBT
8.9:2	Point Patience								
	Solomons Boat Ramp		✓		✓	✓	✓		SSBT
	Calvert Marine Museum		✓			✓	✓		SSBT
8.11:1	On the Patuxent ( <i>Pawtuxent</i> ) River, to the tip of today's Merkle Wildlife Management Area, south of Kings Branch on the eastern shore								
	Merkle Wildlife Management Area	Prince George's, MD	✓			✓	✓		SSBT
8.11:2	Village of Mattpanient ( <i>Mattpament</i> on map)								
	Patuxent River Park	Prince George's MD	✓						SSBT
8.12:1	village of <i>Acquintanacsuck</i>	private land							
8.12:2	the eastern-bank village of <i>Opanient</i>	private land							
8.13:1	St. Jerome Creek	private land							
8.14?	mouth of Rappahannock River								
	near Windmill Point [which county?? Check]	Gloucester Cnty							
8.15-16:1	Moraughtacund village on the Rappahannock								
	Simonson Landing	Richmond Cnty, VA	✓		✓		✓		
	Belle Isle State Park	Lancaster, VA	✓	public	✓	✓	✓		
8.17:1	the north shore of the Rappahannock, possibly nearer the mouth of Piscataway Creek								
	Wares Wharf (Waves?)	Essex, VA	✓				✓		

\* Italics indicates place name as recorded by John Smith

Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/Proposed WaterTrails
8.18:1	Beverley Marsh opposite Carters Wharf near Carters Wharf Landing	Essex, VA Richmond Cnty, VA	✓		✓		✓		
8.18:2	village of <i>Pissasec</i>	private land							
8.19:1	village of <i>Nandtaughtacund</i> , on the southeast side of the broad Port Tobacco Bay	private land							
8.20:1	village of <i>Cuttatawomen</i> , near modern Hopyard Landing	private land							
8.21:1	Fetherstone's Bay' -- may have been on the northeast side of Moss Neck	private land							
8.22:1	shallow stretch of the river just below modern Fredericksburg, in the area of today's Chatham Bridge (State Route 2) George Washingtons Ferry Farm (owned by private foundation)	Kings, VA	✓	private		✓	✓		
8.23:1	the downstream end of Hollywood Bar	private land							
8.23:2	Cuttatawomen	private land							
8.24:1	"They may have stopped at <i>Nandtaughacund</i> " [may have been a landing]	private land							
8.24:2	village of <i>Pissaseck</i>	private land							
8.31:1	the Piankatank River by nightfall, probably at Fishing Bay Hallie Ford Landing	Mathews, VA	✓	private			✓		
9.1:1	werowance's village of Piankatank Deep Point Landing	Gloucester, VA	✓				✓		
9.2:1	up the Piankatank as far as Dragon Run, possibly as far as the straight section past the bends Deep Point Landing	Gloucester, VA	✓				✓		

\* Italics indicates place name as recorded by John Smith

Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/Proposed Water Trails
9.3:1	the mouth of the Poquoson River ("Gosnold's Bay" -- not clear if this is current name or name at the time, need to see if it's in italics on map; no enlargement available as of 4/21/06)								
	Plum Tree Island National Wildlife Refuge	York, VA		closed to public				FWS	
9.4:1	Old Point Comfort								
	Fort Monroe	Hampton, VA		military					
9.7:1	arrived at Jamestown (end of voyage)								
	<b>CHESAPEAKE BAY GATEWAYS in proximity to Voyage 1</b>	<b>Location (Town)</b>							
	Annapolis Maritime Museum (formerly Barge House Museum)	Annapolis, MD	✓		✓	✓	✓		
	Hoffler Creek Wildlife Preserve	Portsmouth, VA	✓		✓	✓	✓		
	Annacostia Community Park	Washington, DC	✓	public					
	The Mariners' Museums	Newport News, VA	✓			✓	✓		
	Piscataway Park	Accokeek, MD	✓		✓	✓	✓		
	Fort McHenry National Monument & Historic Shrine	Baltimore, MD	✓	public	✓	✓	✓		
	Mason Neck State Park	Loudon, VA	✓	public	✓	✓	✓		
	Chesapeake Bay Center	Grasonville, MD	✓	public	✓	✓	✓		
	First Landing State Park	Virginia Beach, VA	✓	public	✓	✓	✓		
	Historic Annapolis Seaport	Annapolis, MD							
	Cape Charles Historic District	Cape Charles, VA	✓		✓	✓	✓		
	Pride of Baltimore II	Baltimore, MD	✓	private					
	Lightship Chesapeake & 7 Foot Knoll Lighthouse	Baltimore, MD	✓		✓				
	Norfolk Water Trail System	Norfolk, VA	✓		✓				
	Elizabeth River Trail -- Atlantic City Spur								
	Potomac River Water Trail	VA, MD	✓		✓				
	Mathews Blueways Water Trails	VA	✓		✓				
	Jamestown Island	Jamestown, VA	✓	public	✓	✓	✓	NPS	
	Reedville Fishermen's Museum	Reedville, VA	✓		✓				

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	Leesylvania State Park	Woodbridge, VA	✓	public	✓	✓	✓		PRWT, SSBT
	Point Lookout State Park	Scotland, MD	✓	public	✓	✓	✓		PRWT, SSBT
	James Island State Park	Crisfield, MD	✓	public	✓	✓	✓		
	Potomac Gateway Welcome Center	King George, VA	✓			✓	✓		PRWT
	St. Clement's Island -- Potomac River Museum	Colton's Point, MD	✓	public	✓				
	Smith Island Center	Ewell, MD	✓		✓				SSBT
	Historic St. Mary's City	St. Mary's City, MD	✓			✓	✓		
	Piney Point Lighthouse Museum and Park	Piney Point, MD	✓		✓				PRWT, SSBT
	Kiptopeke State Park	Cape Charles, VA	✓	public	✓	✓	✓		
	Chippokes Plantation State Park	Surry, VA	✓	public		✓	✓		
	Westmoreland State Park	Montrose, VA	✓	public	✓	✓	✓		
	George Washington Birthplace National Monument and Historic Shrine	Washington Birthplace, VA	✓	public	✓	✓	✓	NPS	
	Annapolis & Anne Arundel County Visitor Information Center	Annapolis, MD	✓			✓	✓		
	North Point State Park	Edgemere, MD	✓	public	✓	✓	✓		SSBT
	Sandy Point State Park	MD	✓	public	✓	✓	✓		SSBT
	Historic London Town and Garden	Edgewater, MD	✓		✓	✓	✓		
	Captain Salem Avery House	Shady Side, MD	✓						SSBT
	Mason Neck National Wildlife Refuge	Lorton, VA	✓	public	✓	✓	✓	FWS	SSBT, Potomac River
	Chesapeake Beach Railway Museum	Chesapeake Beach, MD	✓						SSBT
	Flag Ponds Nature Park	Lusby, MD				✓	✓		
	Smallwood State Park	Marbury, MD	✓	public	✓	✓	✓		SSBT, Potomac River
	Eastern Shore of Virginia National Wildlife Refuge	Northampton, VA	✓	public		✓	✓	FWS	
	Norfolk Water Trail System	Norfolk, VA	✓		✓				
	Gwynns Falls Trail and Greenway								

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Map ID Number (Stop Date)	Stop Name (blue rows) and Nearby Public Lands / Potential Trail Resources (white rows)	Location (County)	Interpretation Potential	Public or Private Ownership	Public Boat Access	Restrooms	Parking	NPS site, NHL, Nat'l Reg., FWS	Overlaps Existing/ Proposed Water Trails
	Fort Washington Park	Fort Washington, MD	✓	public	✓	✓	✓	NPS	
	Stratford Hall Plantation	Westmoreland, VA		private		✓	✓		PRWT
	Powhatan Creek Blueway	Williamsburg, VA	✓		✓				
	J. Millard Tawes Historical Museum & Ward Brothers Workshop	Crisfield, MD	✓		✓	✓	✓		
	Nauticus National Maritime Center	Norfolk, VA	✓	public		✓	✓		
	Virginia Living Museum	Newport News, VA	✓			✓	✓		
	Caledon Natural Area	King George, VA	✓	public		✓	✓		SSBT, Potomac River
	Occoquan Bay National Wildlife Refuge	Woodbridge, VA	✓	public		✓	✓	FWS	
	Calvert Cliffs State Park	Lusby, MD	✓	public		✓	✓		SSBT
	Parker's Creek Watershed Nature Preserve								
	Galesville Heritage Society Museum								
	Baltimore Visitor's Center	Baltimore, MD							
	Virginia -- Eastern Shore Water Trails	Accomac / Port Hampton	✓	private/ public	✓				
	C&O Canal National Historical Park	Washington, DC	✓	public		✓	✓	NPS	Potomac River
	<b>CHESAPEAKE BAY GATEWAYS in proximity to Voyage 2</b>	<b>Location (town)</b>							
	Jefferson Patterson Park and Museum	St. Leonard, MD	✓	public	✓	✓	✓		SSBT, Patuxent
	Solomons Visitor Information Center	Solomons, MD	✓						SSBT, Patuxent
	Susquehanna State Park	Jarrettsville, MD	✓	public	✓	✓	✓		
	Susquehanna River Trail -- Lower	MD	✓		✓				
	Chesapeake Biological Laboratory (UMCES)	Solomons, MD	✓		✓	✓	✓		
	Terrapin Park	Staensville, MD	✓			✓	✓		
	James Mills Scottish Factory Store	Urbanna, VA	✓						

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	Belle Isle State Park	Lancaster, VA	✓	public	✓	✓	✓		
	Calvert Marine Museum	Solomons, MD	✓	public	✓	✓	✓		SSBT, Patuxent
	Havre de Grace Decoy Museum	Havre de Grace, MD	✓			✓	✓		
	Elk Neck State Park	North East, MD	✓	public	✓	✓	✓		
	King's Landing Park	Huntingtown, MD	✓		✓	✓	✓		SSBT, Patuxent
	Battle Creek Cypress Swaamp	Prince Frederick, MD	✓	public	✓	✓	✓		SSBT, Patuxent
	Sotterley Plantation	Hollywood, MD	✓	public	✓	✓	✓		
	Susquehanna Museum of Havre de Grace	Havre de Grace, MD	✓		✓	✓	✓		
	Concord Point Lighthouse	Havre de Grace, MD	✓			✓	✓		
	Greenwell State Park	Hollywood, MD	✓	public	✓	✓	✓		SSBT, Patuxent
	Merkle Wildlife Sanctuary	Upper Marlboro, MD	✓	public		✓	✓		SSBT, Patuxent
	Jug Bay Natural Area								
	Dundee & Saltwater Creeks County Park								
	Sassafras NRMA & Turner's Creek Park								

\* Italics indicates place name as recorded by John Smith

## **APPENDIX E:**

### **SUPPLEMENTARY BACKGROUND INFORMATION**

#### **Captain John Smith's Chesapeake Bay Voyages**

Captain John Smith led two voyages of exploration in the Chesapeake Bay in the summer of 1608. The first expedition sailed from Jamestown on June 2 and returned on July 21. The second departed just three days later, July 24, and returned on September 7. Fourteen men accompanied Smith in the boat, or shallop, on the first voyage, twelve on the second one. Despite the rigors of sailing and rowing for long distances, occasional combat with the Indians, the heat and humidity of the Chesapeake summer, and periods of illness, only one man died during the two voyages.

In exploring the Chesapeake Bay, Smith was following Virginia Company instructions to seek valuable minerals, identify fish and wildlife, study the forests for useful timber, locate good ports, and learn about the Native peoples' towns and numbers of warriors. He also hoped to find the fabled Northwest Passage.

Smith's first voyage took him and his crew up the Bay along the Eastern Shore of present-day Virginia and Maryland, from Cape Charles to the Nanticoke River. Smith then sailed across the Bay and continued north, passing the Severn River and exploring the Patapsco River before sailing south again. He explored the Potomac River as far as the Great Falls, then went south along the western shore of the Bay and returned to Jamestown after the famous episode at Stingray Point.

The second voyage took Smith to the head of the Bay. There, he and his crew sailed and rowed up several rivers: Sassafra, Elk, Northeast, Susquehanna, and Bush. Then, working his way south, Smith explored rivers along the western shore, including the Patuxent, Rappahannock, and Piankatank. On the way back to Jamestown, he looked in on the Elizabeth and Nansemond Rivers.

Smith did not succeed in accomplishing every aspect of his mission—the Northwest Passage did not exist, and he found few valuable minerals—but he acquired a great deal of useful information about the Bay. He learned about the watercourses that emptied into it, the fish and wildlife, the trees and plants, and the Native people, who shared much of what they knew about their homeland. They drew maps in the earth, described the distant terrain up the rivers, and told Smith about other tribes.

From the information Smith gathered, he compiled a map of the Bay and wrote extensively about what he had learned. Just before the voyages, Smith had sent to England a sketch map of that part of the Bay and its river system that he had seen thus far, as well as a letter to a friend. The letter and map were published later in 1608 as *A True Relation of such occurrences and*

*accidents of noate as hath hapned in Virginia since the first planting of that Collony.* After the voyages, and after he returned to England in 1609, Smith set about turning *A True Relation* and his notes and sketch maps into a book. The result, *A Map of Virginia*, appeared in 1612. It consists of a book in two parts, and the map, which was reissued in many “states” between then and 1632. The first part of the book is Smith’s “Description of the Country,” which details the fauna and flora of the Chesapeake region, as well as the American Indians who lived there. The second part describes the history of the colony and has a separate title page: *The Proceedings of the English Colonie In Virginia since their first beginning from England in the yeare of our Lord 1606, till this present 1612.* Although Smith contributed to this section, other authors’ names are on the title page. Interestingly, three of them—Anas Todkill, Walter Russell, and Nathaniel Powell—accompanied Smith on one or both of his Chesapeake Bay voyages. In 1624, Smith published his magnum opus, *The Generall Historie of Virginia, New-England, and the Summer Isles.*

During his time in Virginia, and especially during the voyages on the Chesapeake Bay, John Smith saw more with his own eyes or through the eyes of the Indians than any other Englishman then in Virginia. He gathered data for a map that would guide English explorers and settlers for decades to come. He journeyed a great distance for the time, in an open boat with crews that were often ill; he faced storms and combat; and he brought his men and his vessel safely home. He formed alliances with several American Indian tribes. Regardless of the repercussions, Smith and his companions had survived a grand adventure, and the voyages were a great accomplishment.

The expeditions had far-reaching consequences. Smith’s “discoveries,” recorded in his maps and books, helped to change the Virginia Company policy toward private landholding, and promoted the eventual transformation of the Bay’s environment through the settlers’ farming and exploitation of natural resources. The subsequent large-scale immigration from England increased the pressure on the native peoples and the Bay itself. Smith’s model for settlement in the Bay region largely became the model for English America from New England to the Carolinas. His maps served settlers and colonial governments until late in the seventeenth century. And the stories of his exploits continue to intrigue Americans today.

## **Chesapeake Bay Native Americans**

The distribution of American Indian polities around the Chesapeake Bay, their internal structures and hierarchies, their relationships with one another, and the relative levels of power or authority among their leaders, have been subjects of much scholarly research, opinion, and speculation. The indigenous peoples left behind no organization charts, written constitutions, or published legal codes; the surviving documentation consists only of the writings of John Smith and other English colonists. Most of the colonists, naturally enough, interpreted what they witnessed and experienced of Native life and government in terms of their own life experiences and cultural norms. Some, like Smith, apparently made an effort at times to understand the Native peoples on their own terms. Later non-Native historians and archeologists have likewise been constrained by their own cultural assumptions, although they have tried to bring scientific objectivity to their analyses of Smith’s books and maps and the archaeological record. It is easy to be deceived.

Modern historians, for example, may readily scoff at Smith's well-known account of his rescue by Pocahontas, yet take at face value what he or another writer might say about Powhatan, his actions, or his motives. If an Indian told a colonist that Powhatan caused the mass killing of another tribe, does that necessarily mean it was true? Perhaps the Indian, or Powhatan, or the Englishman who wrote of the alleged incident each had his own motive for making Powhatan seem so brutal. That Powhatan was a talented diplomat, a canny negotiator, a highly respected and feared paramount chief—as well as a tough survivor and nobody's fool—can be taken as given from Smith's and others' writings. However, the exact nature and extent of his power, the limits of his authority, and the truth about his alleged exploits probably will never be known. The same could be said for every other leader and polity around the Bay, which will always remain a bit of a mystery to us, and therefore endlessly fascinating. Every statement made about them should be qualified by using the word “maybe.”

When Captain John Smith set off on his voyages in the summer of 1608, at least five major American Indian polities appear to have dominated the Chesapeake Bay region: Powhatan, Piscataway, Susquehannock, Delaware, and Nanticoke. The Powhatan called their territory Tsenacomoco, occupying most of southeastern Virginia along the western side of the Bay, roughly from its mouth north to the Potomac River. The Piscataway held sway farther north into present-day central Maryland, likewise on the western side of the Bay. The Susquehannock dominated from the head of the Bay north into modern Lancaster and York Counties, Pennsylvania, along the Susquehanna River. Farther east, the Delaware were preeminent. To the south, the Nanticoke inhabited the Delmarva Peninsula.

Some generalizations can be made about the lifeways of the Chesapeake Bay Indian populations at the time of Smith's voyages, regardless of which polity they inhabited. The people lived in towns, large and small, located along the Bay's principal waterways and tributaries. Town sites offered advantages in arable land, fishing, hunting, and communication. Some towns were “fortified”—surrounded by wooden palisades—while others were open. A “typical” large open town sprawled—by European standards—over many acres through fields and woods. Often, a town could not be seen in its entirety because of the forest. A town usually contained garden plots, dwellings, storehouses, and ceremonial and religious structures. Buildings were constructed of poles overlaid with bark or woven mats. Towns might be occupied or virtually deserted at various times of the year, depending on the seasonal demands of gardening, hunting, and fishing. The towns also “migrated” slowly along the rivers as the people reconstructed dwellings closer to fresh arable land. Sometimes the people packed up their towns and moved them to new locations. They also occupied temporary towns or camps during hunts. Periodically the people set parts of the woods afire to remove undergrowth and keep the forest open.

The Bay and the woods provided the people with food. Although the English considered the region to be teeming with fish and animals—which certainly was true in comparison with England—the available food supply increased and decreased with the seasons and weather changes. In periods of drought (the English arrived in the Bay in the midst of one such period), food had to be carefully hoarded and rationed. When the weather cooperated, however, the people had a remarkable abundance of wild and cultivated foods.

Regarding forest- and wetlands-dwelling animals, the bones of deer, turkeys, raccoons, and turtles are often found at archeological sites. The people also consumed bears, rabbits, squirrels, ducks, geese, and a wide variety of other animals and birds. Plants, however, furnished a large proportion of the diet. For several hundred years before 1608, the Native people cultivated crops in garden plots: sunflowers, squash, beans, Jerusalem artichokes, melons, and maize. For millennia before then, they had gathered wild rice, nuts, acorns, berries, fruits, tubers, and succulents. Specific plant-food types varied with the location.

For some thousands of years as well, the people consumed fish, shellfish, animals, and birds. The archeological record provides evidence of Native diets. A site excavated near the mouth of the Chesapeake Bay at Lynnhaven Bay contained remnants of thirty-one species of fish, including sea trout, croaker, spot, menhaden, white perch, sharks, skates, burrfish, needlefish, stargazer, longnosed gar, golden shiner, white catfish, yellow bullhead, and pumpkinseed. Shellfish included blue crabs, three species of clams, ribbed mussels, marsh periwinkle, and oysters. Another site on the James River contained a huge five-foot thick deposit of mussel shells. Sturgeon and catfish remains were also found there. Enormous oyster middens are often found in the Chesapeake region.

Cultivation, gathering, and hunting duties were divided between women and men. Women took care of garden plots and the gathering of wild plants, nuts, and the like. Men hunted and fished. The women also prepared the food regardless of its source.

As in matters related to food, matters of governance and work were generally divided between men and women, whose worlds tended to be parallel but separate. Exceptions were made, but men were usually the warriors, hunters, religious leaders, and chiefs and subchiefs. Women not only cultivated and prepared food, but also gathered firewood and made clothing, twine, baskets, and other household implements. The construction of houses apparently was shared, although when the people moved from one site to another, the women did most of the carrying while the men hunted. Men seem to have done some of the heavy work, however, such as clearing fields for gardens.

Childcare was in the women's domain. Daughters were instructed in the women's arts, but much teaching and learning was by example. Sons watched their fathers prepare for warfare or hunting, and accompanied them when they were old enough. Discipline was enforced by teasing and mocking to ensure adequate conformity, so that the group benefited from the contributions of each member. Mistakes could prove deadly in hunting or warfare; skill had to be acquired quickly. Although both men's and women's work could be dangerous, demanding, or tedious (depending on the season and what needed to be done), there was also ample time for games, festivals, dances, and other forms of recreation and relaxation.

Most of the Chesapeake tribes were matrilineal as far as matters of inheritance and relationships were concerned. They were not ruled by women, but descent and ancestry were calculated through mothers, maternal grandmothers, and so on. This probably confused the English, whose system was patrilineal, and who therefore may have made incorrect assumptions regarding Native authority.

The Indians who lived near the Bay used a network of paths and other routes through the woods to hunt, conduct raids, visit friends and relatives in other towns, and trade. They commonly used the Bay and its tributaries as watery highways, traveling by dugout log canoe. The vessels usually were made of cypress, laboriously chopped down, de-limbed, and towed behind a canoe to a “shipyard” where the log was hollowed out. The slow, tedious process of turning the log into a boat involved repeatedly burning and then scraping small areas of wood with shells.

Despite the many similarities among the various tribes throughout the Chesapeake Bay region, there were several differences, including language. During John Smith’s voyages, he sometimes relied on Indians to serve as translators between one tribe and another. Most of the Chesapeake Indians spoke languages in the Algonquian linguistic group, but the farther apart one tribe lived from another, the greater the likelihood that they would speak different dialects. Most tribes in the region belonged to the Iroquoian linguistic group, but the Susquehannock had a different dialect altogether. West of the rivers’ fall lines, many tribes were Siouan speakers. Native translators were common, especially since the Indian trading networks sometimes extended for hundreds of miles.

The Chesapeake people Smith encountered were generally more similar to each other than they were different, regardless of the polity in which they lived, except for their dialects. Two exceptions were the people he found near the head of the Bay: the mysterious Massawomeck and the Susquehannock. The Massawomeck, stories about whom the other Indians had told Smith, appeared in their birch-bark canoes and obviously were not native to the immediate environs of the Bay. Their exact status and where they lived is hotly debated (the upper Potomac is a possibility), but they were much feared by the other Indians. The second tribe, the Susquehannock, greatly impressed Smith as “the strangest people in all those countries, both in language and attire.” Their language, which was Iroquoian, was strange indeed to Smith. They resided up the Susquehanna River, apparently (according to archaeological investigations) at a single large town on the western bank near present-day Washington Boro in Pennsylvania. Like the Massawomeck, little is known of them beyond Smith’s description, except that their pottery suggests connections with the Iroquois of modern New York. The nature of that association—whether the Susquehannock were from the same biological stock as the Iroquois or merely shared cultural similarities—is still debated.

More is probably “known” about the Powhatan of 1608 than any other paramount chiefdom or tribe in the Chesapeake region, because Smith and the other Englishmen lived among them and wrote about them in the early years of the seventeenth century. Their letters, books, and maps are not extensive—perhaps numbering only several dozen—and have been endlessly examined and analyzed by subsequent historians, anthropologists, and archaeologists. It is largely what is assumed to be known about the Powhatan that forms the basis for extrapolative comparison with polities outside that paramount chiefdom. We do know that the Powhatan were Algonquian speakers residing in the southernmost range of linguistically related people who occupied the East Coast from coastal North Carolina into New England, and who lived in similar towns. A small town named Powhatan, encircled by a palisade, stood at the lower end of the falls of the James River. This town was said to be the birth site of the principal leader (also named Powhatan; another of his names was Wahunsenacawh). Born perhaps about 1547, Powhatan had inherited a domain or polity encompassing a number of tribal districts and a large territory that

he further enlarged by diplomacy as well as conquest. The tribal districts within the polity were led by werowances or chiefs answerable to Powhatan, the paramount chief. The Powhatan polity was located securely in the middle of its territory, near the town at the center of power called Werowocomoco. Less-committed tribes and allies lived along the fringes, and beyond them lived other tribes and other polities.

The principal Powhatan districts along the James River from the Chesapeake Bay upstream were the Chesapeake, Nansemond, Kecoughtan, Warraskoyack, Quiyoughcohannock, Paspahugh, Weyanock, Appomattoc, Arrohattoc, and Powhatan. The Chickahominy, located on the river named for them, successfully resisted becoming part of the Powhatan polity but remained allies. They were governed by a council rather than a werowance. Up the Pamunkey (York) River were the Kiskiack, Werowocomoco, Pamunkey, Mattaponi, and Youghtanund. The Piankatank were on the river of the same name. On the Rappahannock River were the Opiscopank, Cuttatawomen, Moraughtachund, Rappahannock, Pissaseck, Nantaughtacund, and Upper Cuttatawomen. The allied Wicocomoco (Wighcomoco), Chicacoan (Sekakawon), Onawmanient, and Patawomeck occupied the Potomac River. On the Eastern Shore, the Accomac and the Accohannock were part of the polity.

Outside the polity, the greatest threat to Powhatan came from the west, from the Monacan on the upper James River. The Mannahoac, who occupied the upper reaches of the Rappahannock River, also raided the western border of Powhatan land. Both groups were Siouan speakers. Farther north, at the head of the Chesapeake Bay, were the Susquehannock. And in the very far north, principally in present-day Ohio near the Great Lakes, lived the much feared Massawomeck, who periodically raided in birch-bark canoes as far south as the Shenandoah Valley and upper Tidewater Virginia. An array of other tribes and polities occupied present-day northern Virginia, Maryland, Delaware, and Pennsylvania in the vicinity of the Chesapeake. Major polities included the Piscataway on the northern shore of the Potomac River and the Nanticoke across the Chesapeake Bay in Maryland.

Although Powhatan was an imposing and powerful leader, his power was not absolute. His power was personal and religious or shamanic, as well as what the English regarded as political or executive. To a certain extent he ruled by consensus, advised by a council of sub-leaders and religious authorities (“priests”), but he also seemed to dominate the council and could act independently of it. Powhatan was the principal “official” leader, especially when it came to dealing with outsiders, but others such as his brother (or possibly his cousin) Opechancanough were principal war leaders at the time the English arrived.

Powhatan possessed extensive authority to punish his people, but he also bore responsibility for their welfare. Some of his power stemmed from the trust of the people: when times were good, when food was abundant, when the Powhatan people competed successfully with those outside the polity, then his personal and shamanic leadership was unquestionably “right” for the people. But in 1607, Tsenacomoco was deep in a drought that would last until 1612 and eventually affect not only crops such as corn and beans, but also the wild produce and animals that depended on them. In 1607, difficult times lay ahead for the people, even without the arrival of hungry Englishmen.

In part as an assertion of his leadership and also as a hedge against famine, Powhatan received what the English called “tribute,” mostly foodstuffs such as corn and beans, which were placed in storehouses from which they could be drawn for feasts, for trade, for sacred rituals, and for feeding people in times of need. Even in times of relative abundance, seasonal shortages occurred, especially in the spring before wild and domestic crops had ripened. Food was never taken for granted.

The worldviews of the Powhatan and the English could scarcely have been more dissimilar. The Powhatan people saw the land, the flora and fauna, the people, and those who might be called Tsenacomoco’s spiritual inhabitants (especially gods and deceased ancestors) as a unified, inseparable entity, each aspect of which was equally “real.” This worldview has sometimes been oversimplified into the principle that the Native peoples were “one with nature,” a concept that only skims the surface of their reality.

The English worldview held that human beings were a special creation separate from nature, and nature existed to be conquered and put into man’s service. The spiritual realm was someplace else entirely, like nature distinct from the everyday life of human beings. The English polity of 1608 was organized into a rigid hierarchy—the “great chain of being”—and had introduced itself into the “New World” to occupy, subdue, and exploit it. Authority flowed from God to the king to the nobles and to Parliament. Any break in the chain, any disorder in the body politic, led to chaos, treason, and civil madness, as the tragic historical plays of William Shakespeare amply demonstrated. The English assumed that their religious, social, and political lives were essentially correct, and essentially superior to the ways of life of all others. The Indians of America were considered human, but perhaps not as fully human as the English.

Collisions and misunderstandings between the English and the Powhatan peoples were inevitable. This was particularly true because the newcomers generally regarded the Native people as ignorant and savage devil-worshippers living in a “state of nature”—childlike, untrustworthy, and dangerous. The English admitted that the Indians had souls that might be saved through conversion to Christianity, as well as information about the country that might be useful, and goods that were worth trading for or worth taking by force. In English eyes, the native people lacked sacred traditions worthy of respect, lacked social or political culture worth understanding, and lacked an approach to living on the land that was worth adopting. That the country belonged to the Powhatan and other Native peoples—and the English were uninvited “invaders”—scarcely occurred to many of the newcomers.

Powhatan himself probably considered the Englishmen nuisances who might nonetheless prove helpful in countering hostile tribes and supplying useful trade goods, assuming that they survived or remained in his territory long enough to serve his purposes. The Native peoples here, as well as elsewhere along the East Coast, had seen other Europeans come and go. Powhatan must have been puzzled as well as angered when this latest group of arrivals began digging in without his permission on a swampy, unhealthy piece of land on the north side of the James River. Soon thereafter, they began to die in great numbers. When two of the English ships departed in June 1607, 104 men and boys remained in the colony; by the end of the winter, only 38 were left alive. Disease had killed most of them, and the survivors lived primarily because Powhatan fed them from his dwindling stores.

Powhatan's careful calculations about the English and—probably—whether to kill them or feed them were made in an environment in which such decisions could affect the perception of his power, shift his alliances with other polities, and literally result in either death or prosperity for his people. The paramount chiefs and subchiefs in other polities around the Chesapeake would soon be faced with similar decisions about the newcomers. For most of them, their first encounters with these strangers occurred in the summer of 1608 when John Smith and a dozen other Englishmen climbed aboard a small boat and went exploring in the Bay.

## **Captain John Smith's Contact with American Indians in Present-Day Pennsylvania**

On August 1, 1608, while exploring the head of Chesapeake Bay, Captain John Smith and his crew sailed up the Sassafraz River to the Tockwogh Indian town. Various weapons and shields hung from their barge, due to a just-completed trade session with the Massawomeck Indians, whom they had encountered near the mouth of the Sassafraz. The Massawomeck and Tockwogh were enemies; when the latter spotted the weapons, Smith allowed them to believe that he and his men had beaten the Massawomeck in battle and taken the items as prizes. Inquiring as to where the Tockwogh had acquired their iron and brass tools, Smith learned that the tribe had allies farther north with whom they traded. Called the Susquehannock, they lived up the Bay's major tributary, two days' journey above the falls. Smith asked a Tockwogh interpreter who spoke Powhatan to take another Tockwogh who spoke Susquehannock with him to visit the main Susquehannock town on Smith's behalf. The Powhatan spoke one Algonquian dialect, the Tockwogh spoke another, and the Susquehannock spoke Iroquoian; hence, there was a need for translators. Smith wanted to invite the Susquehannock to a parley to establish a trading relationship. After the interpreters left (about August 3), Smith and his party continued to explore, and then waited at present-day Garrett Island on the Susquehanna River.

When the members of the Susquehannock delegation arrived on August 6, Smith was impressed by their numbers and their size. He described them vividly:

Sixty of those Sasquesahanocks came to the discoverers with skins, bows, arrows, targets, beads, swords, and tobacco pipes for presents. Such great and well proportioned men are seldom seen, for they seemed like giants to the English—yea, and to the neighbors [the Tockwogh]—yet seemed of an honest and simple disposition, with much ado 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 beseem their proportions, sounding from them as it were a great voice in a vault or cave as an echo.

Their attire is the skins of bears and wolves. Some have cassocks made of bears' heads and skins that a man's neck goes through the skin's neck, and the ears of the bear fastened to his shoulders behind, the nose and teeth hanging down his breast, and

at the end of the nose hung a bear's paw; the half-sleeves coming to the elbows were the necks of bears and the arms through the mouth with paws hanging at their noses. One had the head of a wolf hanging in a chain for a jewel, his tobacco pipe three quarters of a yard long, prettily carved with a bird, a bear, a deer, or some such device at the great end, sufficient to beat out the brains of a man, with bows and arrows and clubs suitable to their greatness and condition.

These are scarce known to Powhatan. They can make near six hundred able and mighty men, and are palisadoed in their towns to defend them from the Massawoekes, their mortal enemies. . . .

The picture of the greatest of them is signified in the map, the calf of whose leg was three quarters of a yard about and all the rest of his limbs so answerable to that proportion that he seemed the goodliest man that ever we beheld. His hair, the one side was long, the other shore close with a ridge over his crown like a coxcomb. His arrows were five quarters long [45 inches], headed with flints or splinters of stones in form like a heart, an inch broad and an inch and a half or more long. These he wore in a wolf's skin at his back for his quiver, his bow in the one hand and his club in the other as is described. . . .

Five of the their chief werowances came boldly aboard us to cross the bay for Tockwhogh, leaving their men and canoes, the wind being so high they durst not pass.

Archaeological evidence from Susquehannock burial sites gives the lie to Smith's description of these Indians as "giants"—they were of normal size. To impress Smith, the chiefs may have selected their tallest warriors for the delegation.

Although much has been written about the later Susquehannock, much about them at the time of Smith's encounter remains a mystery. Their name, Susquehannock, is what the Tockwogh called them; what they called themselves is not known. The principal town, which Smith called Sasquesahanough, has since been located through archaeological investigation at Washington Boro, Pennsylvania, on the eastern bank of the river. Apparently it had only been occupied since about 1600, when the Susquehannock moved there from a location a short distance downstream at a place that archaeologists call the Schultz site. The Susquehannock had only occupied the Schultz site for about twenty-five years when they moved upstream to Washington Boro, having allegedly exhausted the woods and soil in the former place.

The fact that the Susquehannock were Iroquoian speakers suggests a link to the Iroquois of present-day New York, where one branch of the river also has its headwaters. Pottery fragments found at sites in both New York and Pennsylvania support this theory. The nature of that link, however, is unclear. Were the Susquehannock essentially Iroquois who migrated downstream (divergence), or were they a separate group that shared certain cultural features with the Iroquois (convergence)? The question has not yet been answered. Similarly, assuming that the

Susquehannock originated in New York, or at least far upstream, why did they move to the lower part of the river? One theory is that the Susquehannock was a trading route with European settlers at least as important as the St. Lawrence River, and the Indians moved south to control a strategically vital location relative to trade via the Chesapeake Bay. That theory, likewise, is the subject of debate.

Excavations at the Susquehannock town site at Washington Boro have confirmed that it was palisaded and contained longhouses, not unlike some Powhatan towns. An estimated 1,700 people lived there. Soon, the Susquehannock became middlemen in the valuable beaver-pelt trade with the European settlers along the seaboard. Their location on the river enabled them to compete with other tribes, including the Iroquois, who periodically attacked them. The Susquehannock, in turn, extended their influence into the Potomac River valley as far west as present-day Romney, West Virginia. The success of the Susquehannock—at first—in defending their interests from the Iroquois and others, and in prospering from their trade with the Europeans, is reflected in the artifacts found in several burial sites. Although Susquehannock society is believed to have remained essentially matrilineal (similar to Powhatan society), individuals within the Susquehannock may have formed an elite group based on access to and the acquisition of increasing quantities of European goods, in comparison to Native goods. Later, however, the European goods became so common that they were widely spread throughout the tribe.

By the mid-1600s, battles and disease had depleted the Susquehannock, who resettled in smaller towns within the Washington Boro neighborhood until about 1690, when they relocated several miles upstream to Conestoga Town. There, in 1763, the last of the Susquehannock were lynched in the infamous Paxton Boys attack.

John Smith's Chesapeake Bay voyages in the summer of 1608 resulted in maps and books that conveyed the information he had acquired (particularly from his contacts with Indian tribes) to the Virginia Company. The expeditions also presented a challenge to Powhatan's paramount chiefdom. Smith returned to Jamestown in September having effectively formed trading relationships with many of Powhatan's enemies, including the much-feared Massawomeck and the Susquehannock, who were raiding the northern fringes of Powhatan's territory. Powhatan had hoped to make the English subservient to him through Smith; Smith, however, had in effect gone "over Powhatan's head" and forged alliances on behalf of the English colonists. The Chesapeake Bay voyages shifted the balance of power; relations between Powhatan and the English soon deteriorated, and never fully recovered. The decline of the Powhatan paramount chiefdom had begun.

## **The Chesapeake Bay — Then and Now**

### **Geology of the Bay**

The Chesapeake Bay is of relatively recent formation in geological time, but the Susquehanna River, which helped to form it, is one of the most ancient in the world—perhaps second in age to Virginia's New River. The four-hundred-and-fifty-mile-long Susquehanna, the longest river on the East Coast, enters the Chesapeake Bay at Havre de Grace, Maryland. About a million years ago at the end of the Pleistocene, the Bay constituted the river's lower valley. (Traces of the old

riverbed can still be detected, sometimes lying hundreds of feet below the waters of the generally shallow Bay.) The basin or valley flooded and drained several times over the next million years, until it last began to fill about 18,000 years ago. Mud and silt from the Bay's estuaries also flowed in to help make the Bay as shallow as it is today.

In addition to these changes, the periodic advance and retreat of glaciers during succeeding ice ages helped carve the landscape around the Bay. Water, ice, and other geologic forces have produced the typical Tidewater landscape as a result: flat, fertile land with broad, navigable rivers fed by numerous smaller watercourses. Since the Bay was once a valley, however, the land is not uniformly flat; bluffs and eroding cliffs are prominent features in numerous locations, especially along tributaries. Chromium, iron, coal, and rich soil were deposited in several areas of the region, especially in the vicinity of the present-day Susquehanna River in Pennsylvania.

The mouth of the Bay includes a peculiar feature: an impact crater from a meteor that struck there about 35 million years ago, long before the Bay existed. Measuring fifty miles across, the crater includes a depression that probably controlled the position of the Bay's mouth and helped concentrate the confluence of the James, York, Rappahannock, and Potomac River systems in the lower Bay.

## Life in the Bay

The Chesapeake Bay of 1608 was bordered by hundreds of thousands of acres of submerged aquatic vegetation, consisting of a wide variety of rooted and flowering plants. Freshwater streams hosted a dozen or more species, including wild celery, common waterweed, horned pondweed, and redhead grass. Tidal fresh and brackish waters contained mostly widgeon grass and eelgrass. This vast complex of streams and marshland provided havens for juvenile fish, small fish species, blue crabs, and various invertebrates. Today, the marshlands have declined to an estimated seventy-four thousand acres.

John Smith encountered shorelines thick with vegetation. In those days, tuckahoe (arrow arum), pickerelweed, wild rice, and cow lily were found in freshwater areas as well as in tidal fresh and brackish waters. Saltmarsh cordgrass dominated the saltier marshes. Waterfowl and shore birds fed on seed plants such as black needlerush and three-square sedges.

Smith described the great variety of fish he found in the Bay and its tributaries:

Of fish we were best acquainted with Sturgeon, Grampus [pilot whales], Porpus, Seales [river otters], [and] Stingraies, whose tailes are very dangerous. Bretts, Mulletts, white Salmonds, Trowts, Soles, Plaice, Herrings, Conyfish, Rockfish [striped bass], Eeles, Lampreys, Catfish, Shades [shad], Pearch of three sorts, Crabs, Shrimps, Crevises, Oysters, Cocles [whelks], and Muscles.

Later writers who saw the Bay in its seventeenth-century splendor described the massive spawning runs of anadromous fishes, including striped bass, white perch, and sturgeon. Menhaden, not truly anadromous, was also seen in such quantities that it was likely the fish that Smith and his crew attempted to catch with a frying pan on the Potomac River in June 1608.

Resident predator fish—aside from those like the striped bass that feed opportunistically on spawning fish—included the longnose gar, bowfin, and chain pickerel. Eels, which were spawned in the Sargasso Sea, made their way to the Bay and other coastal waters to swim upstream and live most of their adulthood before returning to the Sea to spawn and die. Temporary visiting species frequently included vast numbers of bluefish and Spanish mackerel, as well as kingfish, black drum, and red drum. Sandbar sharks, as well as various skates and rays, were seen in the lower Bay, as Smith knew from painful personal experience. Marine mammals included dolphins, pilot whales, and loggerhead turtles. Among the permanent residents of the Bay and its tributaries were perch, catfish, bullhead, bay anchovies, silversides, and winter flounder. Crustaceans included crawfish, blue crab, whelks, mussels, clams, and oysters.

One translation of the Algonquian word for the Chesapeake is “The great shellfish bay.” Whether or not the translation is accurate, it offers linguistic support for the scientific fact of the Bay’s once-vast abundance. Today, the populations of many species are far lower than they were in 1608. Notoriously, the numbers of oysters, other shellfish, and sturgeon have either declined dramatically or have virtually disappeared. The causes are well-known: overharvesting, urban and suburban development, pollution, and excessive amounts of nutrients from agricultural runoff are among the leading contributors to the Bay’s decline from its colonial role as America’s premier fishing ground to today’s fragile ecosystem that’s seemingly near collapse. In addition, introduced non-native species such as carp, the Asiatic clam, and the European zebra mussel threaten the indigenous populations.

## **Life beside the Bay**

Most of the Chesapeake Bay drainage was covered by deep forest in 1608. The characteristics of that forest, however, varied dramatically from place to place, as the writings of Smith and others reveal. In some places, the forest was park-like, with large trees shading relatively undergrowth-free ground beneath. Depending on location, this condition might have been due to natural forces—from extensive browsing by deer, or as the product of hardwood forest at maturity—or the bare undergrowth may have been due to periodic intentional burning by Indians. In other places, the undergrowth was so thick as to be almost impenetrable. The forests, then as now, were subject to change not only from the natural progression of species and human activity, but also from drought, flood, lightning, and hurricanes.

The species of trees that Smith saw likewise varied widely depending on location. In Bay-area wetlands, the bald cypress—the tree of choice for Indian canoes—grew in company with black gum, sweetgum, green ash, and red maple. The understory consisted of American holly, poison ivy, Virginia creeper, coastal pepper bush, and southern arrowwood. Along the edges of watercourses, Smith encountered sycamores, river birches, slippery elms, tulip poplars, red maples, and black gums. The dominant evergreen along tidal marshes was the loblolly pine. Smith was most excited, however, about the magnificent oak, beech, walnut, hickory, ash, elm, and chestnut trees he saw, because of their potential commercial value.

A large number of trees and bushes produced useful nuts, seeds, and fruits. Besides acorns, walnuts, hickory nuts, and pine seeds, Smith found mulberries, crabapples, persimmons, wild plums, passion fruit, blueberries, blackberries, raspberries, elderberries, huckleberries, and wild

grapes. In addition, Smith learned from the Indians about wild salad plants and two other wild plants that could produce bread flour: little barley and tuckahoe (arrow arum).

The forests by the Bay were home to several species of land animals, many of which Smith identified. The opossum and raccoon, new to the Europeans, are still common and still known by their Powhatan names. Deer, squirrels (including flying squirrels), rabbits, bears, wolves, bobcats, foxes, martens, skunks, weasels, minks, otters, and beavers were also abundant. Later residents or visitors to the Bay's western and northern drainages occasionally wrote of elk and bison, but no bison bones have been identified at Native archeological sites close to the Bay.

Birds included a wide variety of songbirds such as the cardinal, which was new to the English. Eagles, hawks, quails, and wild turkeys were common. Passenger pigeons were famously described as migrating by the millions in seemingly endless clouds, but are now extinct. Waterfowl flew into and around the Bay, especially as various species migrated in the spring and autumn. They included wood ducks, green-winged teal, ring-necked ducks, pintails, long-tailed ducks, common loons, scaups, Canada geese, and other varieties, in numbers that stunned the English.

The changes in faunal and floral concentrations in the Chesapeake Bay watershed between 1608 and the present have been as dramatic as the changes to the fish, shellfish, and water plants of the Bay itself. In 1608, perhaps 90 percent of the Bay watershed was woodland; by the end of the nineteenth century, after two centuries of agricultural and urban development, it was about 25 percent. Consequent loss of habitat has been a major factor in the decline of many animal species. The passenger pigeon and wolf were hunted to extinction. In general terms, species that required undisturbed habitat have declined or vanished; those that thrive on disturbed habitats such as farm fields, industrial sites, and housing developments—those that do well in association with humans—have persisted or even increased in numbers. English house sparrows, for example, have done well; the Carolina parakeet is no more. Among once-numerous animals, white-tailed deer still are thriving in part because their natural predators (wolves) are no longer present, having been extirpated.

The appearance of the Bay and its tributaries today, compared to Smith's time, varies widely from one place to another. From the water, much of the Bay's shoreline may appear similar in the absence of obvious development, especially in areas where reforestation has occurred. Closer inspection, however, usually reveals signs of human activity, such as the lining of banks with rubble stone to reduce erosion, or modern dwellings hidden among the trees. The former steel plant at Sparrows Point on the Patapsco River is hard to miss, but the Great Falls of the Potomac and parts of the Patuxent River still look much as they did when Smith saw them. The views around the Bay—whether thick with manmade structures, or almost pristine—are as varied as the Bay itself.

## **APPENDIX F:**

### **FREEMAN TILDEN'S INTERPRETIVE PRINCIPLES**

1. Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
2. Information, as such, is not interpretation. Interpretation is revelation based upon information. These are entirely different things. All interpretation, however, includes information.
3. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical, or architectural. Any art is in some degree teachable.
4. The chief aim of interpretation is not instruction, but provocation.
5. Interpretation should aim to present a whole rather than a part, and must address itself to the whole person rather than any phase.
6. Interpretation addressed to children (say, up to the age of twelve) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best it will require a separate program.

## APPENDIX G:

### TEACHER/EDUCATIONAL RESOURCES

This is just a sampling of some of the educational resources available today.

- Chesapeake Academic Resources for Teachers (ChART) is a resource designed to help educators provide meaningful watershed educational experiences to their students. ChART offers educators Bay related lesson plans and activities, field studies and professional development opportunities.

ChART is aimed at increasing hands-on learning about the Bay. Hands-on learning has been shown to increase academic performance and enthusiasm as well it can instill a strong environmental stewardship ethic in our youth.

<http://chart.chesapeakebay.net>

- **Captain John Smith**

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➤ **Jamestown**

- Jamestown – Journey of Democracy

Organization: America’s 400th Anniversary

Grade(s): K - 12

A unique collection of educational resources (nearly 100 Jamestown related lesson plans, activities, etc.) and a website that addresses multiple points of views both culturally and politically.

<http://www.jamestownjourney.org:8080/Home.htm>

- Virtual Jamestown digital research, teaching and learning project “explores legacies of Jamestown settlement” – [www.virtualjamestown.org](http://www.virtualjamestown.org)

- Jamestown Fort: Finding History

Organization: University of Virginia

K-12 Objectives:

1. Identify the location of the original Jamestown Fort.
2. Identify artifacts from archeological exploration of the Jamestown Fort location.
3. Construct a short fictional account about life among Jamestown's first inhabitants.

<http://www2.vcdh.virginia.edu/teaching/jamestown/fort.html>

## ➤ Smith's Journals

- John Smith's 1st Voyage Exploring the Chesapeake Bay - A Worksheet for Grades 4-5

Students will be able to:

- 1) Interpret a primary source; John Smith's map and excerpts from his journal.
- 2) Identify places on a map that show John Smith's route.
- 3) Identify geographic characteristics seen by John Smith on his first voyage of the Chesapeake Bay.

[http://www.johnsmith400.org/John\\_Smith\\_1st\\_Voyage\\_2.pdf](http://www.johnsmith400.org/John_Smith_1st_Voyage_2.pdf)

## ➤ Smith's Maps

- A PDF 4-page print out of Smith's 1612 map.

[http://www.johnsmith400.org/JOHN\\_SMITH\\_MAP.pdf](http://www.johnsmith400.org/JOHN_SMITH_MAP.pdf)

- Using John Smith's Map of the Chesapeake Bay - A Worksheet for Grades 4-5

Students will be able to:

- 1) Interpret a primary source; John Smith's map and excerpts from his journal.
- 2) Identify places on a map that show John Smith's routes.
- 3) Identify map elements on Smith's map.

<http://www.johnsmith400.org/UsingMapinClassroom.pdf>

- John Smith, A Map of Virginia, 1612 - The Library at The Mariners' Museum

This program is an interactive version of John Smith's 1612 map. In this application users can see the relationship between the map and passages from the book.

<http://www.mariner.org/chesapeakebay/colonial/col009.html>

## ➤ The Shallop

- Captain John Smith's Shallop

Organization: John Smith 400

Grade(s): 4 - 5

Students will be able to:

- 1) Identify and describe a shallop.
- 2) Give examples of how shallops were used by the colonists.
- 3) Identify various parts of a shallop.
- 4) Compare Captain John Smith's shallop to an Indian dugout canoe.

This resource contains 4 teacher transparencies and 4 student handouts.

[http://www.johnsmith400.org/Captain\\_John\\_Smiths\\_Shallop.pdf](http://www.johnsmith400.org/Captain_John_Smiths_Shallop.pdf)

## ➤ The Voyages

- John Smith's 1<sup>st</sup> Voyage Exploring the Bay

Organization: John Smith 400

Grade(s): 4 - 5

Students will be able to:

- 1) Interpret a primary source; John Smith's map and excerpts from his journal.
- 2) Identify places on a map that show John Smith's route.
- 3) Identify geographic characteristics seen by John Smith on his first voyage of the Chesapeake Bay.

[http://www.johnsmith400.org/John\\_Smith\\_1st\\_Voyage\\_2.pdf](http://www.johnsmith400.org/John_Smith_1st_Voyage_2.pdf)

- John Smith's 2<sup>nd</sup> Voyage Exploring the Bay

Organization: John Smith 400

Grade(s): 4 – 5

Students will be able to:

- 1) Interpret a primary source, John Smith's map and excerpts from his journal.
- 2) Identify places on a map that show John Smith's route.
- 3) Identify geographic characteristics seen by John Smith on his second voyage of the Chesapeake Bay.

[http://www.johnsmith400.org/John\\_Smith\\_2nd\\_Voyage.pdf](http://www.johnsmith400.org/John_Smith_2nd_Voyage.pdf)

- Native Americans

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## ➤ Natives and the Bay

- Native Americans and Natural Resources

Developed By: Chris Cerino, Sultana Projects, Inc.; Sari Bennett, Maryland Geographic Alliance; Pat Robeson, Maryland Geographic Alliance

Grades(s) 4-5

Students will be able to:

- 1) Identify Indian tribes/chiefdoms that existed in the Chesapeake region in the early 1600's.
- 2) Identify a potential site for an Indian town based on the presence of natural resources in the area.
- 3) Identify natural resources that American Indians of the Chesapeake region used for food, clothing, and shelter.

[http://www.johnsmith400.org/Native\\_Americans\\_and\\_Natural\\_Resources.pdf](http://www.johnsmith400.org/Native_Americans_and_Natural_Resources.pdf)

## ➤ Pre-Contact

- Chesapeake Bay: Using Primary vs. Secondary Sources

Organization: John Smith 400

Grade(s): 4 - 5

Students will be able to:

- 1) Interpret primary and secondary sources to gather information about the American Indian tribes present in the Chesapeake Bay region in the 16th and 17th centuries.
- 2) Identify basic elements in American Indian culture at point of first contact in the Chesapeake region such as clothing, agricultural practices, architecture, cooking techniques and diet.

[http://www.johnsmith400.org/Native\\_Americans\\_Primary\\_and\\_Secondary\\_Sources.pdf](http://www.johnsmith400.org/Native_Americans_Primary_and_Secondary_Sources.pdf)

- Chesapeake Bay – Native Americans

Organization: The Mariners' Museum

An interactive web site that provides detailed lessons about the Chesapeake Bay Indians.

Information includes: Pre-contact, Post-contact, Strachey's *A Dictionarie of the Indian Language*, Smith's Vocabulary of Indian words, Weroances and Their Tribes, English Observers, William Strachey's *Description of Critters in the Chesapeake Bay*, Henry Spelman, Relation of Virginia, 1609.

<http://www.mariner.org/chesapeakebay/native/nam002.html>

- Pre-Visit Lesson: People and Place

Organization: Jefferson Patterson Park and Museum

Within this series of classroom lessons and on-site programs, students will gain an understanding of how something as simple as an oyster shell or a piece of charcoal can tell us more about the changes in our environment than one would ever imagine. This lesson asks students to use models and maps to attempt to reconstruct the amount of human impact on the Chesapeake Bay watershed before European colonization and after as well as discuss how our increasing population and resource use is affecting our environment today.

<http://jefpat.org/3educ-TeacherResources.htm>

## ➤ Tribes and Culture

- We Have a Story to Tell

Organization: National Museum of the American Indian

This lesson primarily covers the period from the early 1600s to the present. Students explore how colonial settlement and the establishment of the United States affected the Native Americans of the Chesapeake region, especially the Powhatan, Nanticoke, and Piscataway peoples. Students will learn about the forces that resulted in the eradication of some tribes and how others survived. Students will also participate in small group projects to understand issues of critical importance to Chesapeake Native communities today. The lesson includes five sections.

<http://www.nmai.si.edu/education/files/chesapeake.pdf>

## • The Chesapeake Bay

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### ➤ Bay Facts and Figures

- NOAA's Chesapeake Bay Office provides an array of teacher and student resources at: <http://noaa.chesapeakebay.net/educationmain.aspx>
- NOAA has developed educational programs utilizing data from Chesapeake Bay Interpretive Buoy System (CBIBS) for classrooms (<http://www.buoybay.org/site/public/classroom/>) and through field experience on the Captain John Smith Chesapeake National Historic Trail.

- Lessons from the Bay

Organization: Virginia Department of Education

The purpose of Lessons from the Bay is to help Virginia school teachers incorporate into their classrooms a variety of activities and projects related to protecting and restoring the Chesapeake Bay watershed, in keeping with the state's commitment in the Chesapeake 2000 Agreement. To accomplish this purpose, Lessons from the Bay offers five sections of instructional resources.

<http://www.doe.virginia.gov/VDOE/LFB/lessonplans/index.html>

- Eyes on the Bay

Organization: Maryland Department of Education

These resources and lesson plans were developed to support science and environmental studies and to aid educators in integrating these topics within the regular curriculum when studying Maryland's Chesapeake Bay and Coastal Bays. The goal is to integrate student learning of science concepts with the use of technology and current scientific data. The aim is to facilitate the involvement of teachers and students in authentic science and environmental investigations. In this lesson series, the Eyes on the Bay website is used to gather information and interpret data. Educators are encouraged to visit local streams and use probes and other water quality testing kits to enhance their use of technology.

[http://mddnr.chesapeakebay.net/eyesonthebay/lesson\\_plans.cfm](http://mddnr.chesapeakebay.net/eyesonthebay/lesson_plans.cfm)

### ➤ Bay Formation

- Chesapeake Bay Fossils/Geology

Organization: Bay Link

Grade(s): 5 - 10

Students will be able to:

- 1) Define and investigate paleontology.
- 2) Research geological history of the Chesapeake Bay.
- 3) Review a geological time line.
- 4) Identify fossils of the Chesapeake Bay.

[http://www.baylink.org/lessons/3fr\\_fossil.html](http://www.baylink.org/lessons/3fr_fossil.html)

## ➤ Habitats

The Maryland Association for Environmental and Outdoor Education (MAEOE) has a variety of resources available – <http://maeoe.org>

- The Chesapeake Bay in Captain John Smith's Time

Organization: John Smith 400

Grade(s): 4 - 6

Students will analyze primary sources in order to assess the presence of various animals and the quality of the Chesapeake Bay habitats in the 1600s. Students will compare the Chesapeake Bay of the 1600s with that of today.

[http://www.johnsmith400.org/The\\_Chesapeake\\_Bay\\_in\\_1608.pdf](http://www.johnsmith400.org/The_Chesapeake_Bay_in_1608.pdf)

- Aquatic Habitats

Organization: Discovery Education

Grade(s): 6 - 8

Students will learn:

- 1) The concept that the way a community disposes of its wastewater may negatively affect local aquatic habitats.
- 2) It is possible to find wastewater-disposal methods that do not pollute local aquatic habitats.
- 3) Governments and citizens can take action to ensure that waste water will be disposed of in a way that is not destructive to aquatic habitat.

<http://school.discoveryeducation.com/lessonplans/programs/aquatichabitats/>

- Educational programs and curricula at Pickering Creek Audubon Center – <http://www.pickeringcreek.org/edprograms/index.html>

- Bay and Pond Food Webs

Organization: Virginia Department of Education

Students will be able to:

- 1) Compare and contrast two water habitats
- 2) Research and classify plants and animals.
- 3) Act out the Bay food web and diagram the flow of energy through it.
- 4) Discuss the impact of pollution, loss of underwater grasses, and over-fishing on the Bay's animal resources.
- 5) Identify and classify plants and animals found in a pond ecosystem and analyze data.

<http://www.doe.virginia.gov/VDOE/LFB/lessonplans/foodwebs/index.html>

## ➤ Modern Settlements

- Maryland's Chesapeake Bay Landscape Long Ago and Today

Organization : John Smith 400

Grades: 4 – 5

Students will be able to:

1) Use geographic tools to locate places and describe the human and physical characteristics of those places.

2.) Describe geographic characteristics of Maryland/United States using resources, such as photographs, maps, charts, graphs and atlases.

3. Describe similarities and differences of regions by using geographic characteristics.

[http://www.johnsmith400.org/MD\\_CHEESAPEAKE\\_BAY\\_LONG\\_AGO\\_TODAY.pdf](http://www.johnsmith400.org/MD_CHEESAPEAKE_BAY_LONG_AGO_TODAY.pdf)

## ➤ Watermen

The Captain Salem Avery House (Shady Side, MD) produced an activity guide entitled “The Seasons of the Chesapeake Watermen” – [www.chesapeakewaterman.org](http://www.chesapeakewaterman.org)

## ➤ The Bay and Smith

- The Chesapeake Bay in Captain John Smith's Time

Organization: John Smith 400

Grade(s): 4 - 6

Students will analyze primary sources in order to assess the presence of various animals and the quality of the Chesapeake Bay habitats in the 1600s. Students will compare the Chesapeake Bay of the 1600s with that of today.

[http://www.johnsmith400.org/The\\_Chesapeake\\_Bay\\_in\\_1608.pdf](http://www.johnsmith400.org/The_Chesapeake_Bay_in_1608.pdf)

- Captain John Smith's Chesapeake Bay

Organization: Virginia Department of Education

Grade(s): 3 - 6

Compares and contrasts the Chesapeake Bay of today with the Chesapeake Bay of John Smith's day.

<http://www.doe.virginia.gov/VDOE/watershed/lessonplans/johnsmith/index.html>

## ➤ Restoration Efforts

- The Chesapeake Bay: A Time for Change

Organization: National Geographic

Grade(s): 9 - 12

In this lesson, students will conduct research on the Chesapeake Bay, from Captain John Smith's explorations of the Bay and its tributaries and his interactions with Native Americans in the early seventeenth century to the present, and examine how these changes over time can help illuminate the interrelationship between people and place. They will then apply a similar approach to their local area. Through an examination of a timeline of change, students will make connections between the present interaction with place and its future and consider ways they can help shape the future course of both the Chesapeake Bay watershed and their own community.

<http://www.nationalgeographic.com/xpeditions/lessons/04/g912/chesapeake.html>

- Making the Grade: Health Indicators in the Chesapeake Bay Watershed

Organization: National Geographic

Grade(s): 9 - 12

Using the Chesapeake Bay, the largest estuary in the United States, and its watershed as a model, this lesson will focus on how the sciences can identify clues about the health of the environment and the ways in which geography can help make connections between human actions and environmental conditions. Students will use online tools and resources to examine data concerning key indicators of the health of the Chesapeake Bay watershed and the factors that affect them. They will examine how industrial and residential runoff affects the Bay, identify the importance of underwater Bay grasses, and describe how decreased oyster production in the bay both is caused by and contributes to poor water quality. By cross-referencing the data, students will piece together an overall "report card" for the Chesapeake Bay, and then compare their findings with those of the Chesapeake Bay Foundation in its latest State of the Bay report. Students will learn about efforts to preserve and restore the Bay's health, such as the Chesapeake Bay Program, a major multi-organizational restoration effort, and then apply what they have learned about identifying and solving problems to develop a local action plan for preserving or restoring a resource in their own communities.

<http://www.nationalgeographic.com/xpeditions/lessons/14/g912/chesapeakescience.html>

## ➤ Wildlife

- Aquatic Invaders

Organization: National Geographic Xpeditions

Grade(s): 6 - 8

In this activity, students will explore the ways that native species interact in a healthy Chesapeake Bay. They will then learn about some of the ways that exotic or invasive species can threaten the balance of the ecosystem. Students will discover how the various elements of the Bay ecosystem are interconnected and investigate some of the issues associated with invasive species.

<http://www.nationalgeographic.com/xpeditions/lessons/14/g68/invaders.html>

- Chesapeake Bay Population Studies

Organization: Bay Link Grade(s): 6 – 8

The students will use a quarter meter quadrant to determine population density, relative density frequency, and relative frequency; calculate a diversity index; and establish a correlation of association between any two species.

[http://www.baylink.org/lessons/pop-density\\_right.html](http://www.baylink.org/lessons/pop-density_right.html)

## **APPENDIX H:**

### **ACCESSIBILITY INFORMATION**

#### ***Resources:***

##### **National Center on Accessibility**

Indiana University Research Park

501 North Morton St, Suite 109

Bloomington, IN 47404

Voice: (812) 856-4422

TTY: (812) 856-4421

Fax: (812) 856-4480

[nca@indiana.edu](mailto:nca@indiana.edu)

**Programmatic Accessibility Guidelines for National Park Service Interpretive Media,**  
[www.nps.gov/hfc/accessibility](http://www.nps.gov/hfc/accessibility).

#### ***Regulations:***

**National Park Service units and other federally-operated sites must ensure compliance with the following regulations:**

- The Architectural Barriers Act of 1968 (P.L. 90-480);
- Section 504 of the Rehabilitation Act of 1973 (P.L. 930112);
- Section 501 of the Rehabilitation Act of 1973;
- Section 508 of the Rehabilitation Act of 1973;
- The Equal Employment Opportunity Act of 1972;
- The Americans with Disabilities Act of 1990.

**Additional Regulations and Standards apply for Department of Interior units, including:**

- Enforcement of Nondiscrimination on the Basis of Handicap in Department of Interior Programs (43 CFR 17.501-17.570)
- Uniform Federal Accessibility Standards (SFAS)
- Americans with Disabilities Act Accessibility Guidelines (ADAAG)

***Section 504 of the Rehabilitation Act of 1973*** provides for access to all programs, structural and non-structural. Non-structural programs relate to the provision of policies, procedures, and effective communication for program participants and employees with disabilities. Access must

be provided to all existing programs, structural and non-structural, unless it can be determined that it would be a direct threat, would alter the fundamental nature of the program or be an undue burden (significant difficulty or expense based on the resources of the entity). If one of these exceptions is demonstrated, the Agency must provide an alternative, effective method of access.

*The Americans with Disabilities Act of 1990 (ADA)* protects Americans with physical or mental impairments (or a record of impairments) that substantially limit daily activities, including: working, walking, talking, seeing, hearing, or caring for oneself.. The Act has the following five titles:

Title I – Employment;

Title II - Public Services (state and local government);

Title III - Public Accommodations and Services Operated by Private Entities;

Title IV – Telecommunications;

Title V - Miscellaneous Provisions.

The following notations highlight some of the ADA requirements related to public services and accommodations:

Title II of the ADA requires that services and programs of local and State governments, as well as other non-Federal government agencies, shall operate their programs so that when viewed in their entirety, they are readily accessible to and usable by individuals with disabilities. Title II entities must make their programs accessible to individuals who are unable to use an inaccessible existing facility; must provide auxiliary aids to ensure that communications with individuals with hearing, vision, or speech impairments are as effective as communications with others (unless an undue burden or fundamental alteration would result); and may impose safety requirements that are necessary for the safe operation of a program if they are based on actual risks (and not on mere speculation, stereotypes, or generalizations about individuals with disabilities).

Title III of the ADA requires that in providing goods and services, a privately-owned public accommodation may not use eligibility requirements that exclude or segregate individuals with disabilities, unless the requirements are necessary for the operation of the public accommodation. It also requires public accommodations to make reasonable modifications to policies, practices, and procedures, unless those modifications would fundamentally alter the nature of services provided by the public accommodation. Title III also requires that public accommodations provide auxiliary aids necessary to enable persons who have visual, hearing, or sensory impairments to participate in the program, but only if their provision will not result in an undue burden on the business. With respect to existing facilities of public accommodations, physical barriers must be removed when it is “readily achievable” to do so (i.e., when it can be accomplished easily and without much expense). However, all construction of new building facilities and alterations of existing facilities in public accommodations must comply with the ADA Accessibility Guidelines (ADAAG).

Title IV requires that all televised public service announcements produced by or funded in whole or part by the federal government include closed captioning.

***Americans with Disabilities Act (ADA) Amendments (effective January 1, 2009)*** - The new ADA Amendments (signed into law on September 25, 2008), make important changes to the definition of the term “disability” by rejecting the holdings in several Supreme Court decisions and portions of the Equal Employment Opportunity Commission’s ADA regulations. The amendments retain the ADA’s basic definition of activities, a record of such an impairment, or being regarded as having such an impairment. However, it changes the way these statutory terms should be interpreted in several ways. Most significantly, the amendments:

1. Direct the U.S. Equal Employment Opportunity Commission (EEOC) to revise that portion of its regulations defining the term “substantially limits”;
2. Expand the definition of “major life activities” by including two non-exhaustive lists:
  - the first list includes many activities that the EEOC has recognized (e.g., walking) as well as activities that EEOC has not specifically recognized (e.g., reading, bending, and communicating)
  - the second list includes major bodily functions (e.g., “functions of the immune system, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions”);
3. State that mitigating measures other than “ordinary eyeglasses or contact lenses” shall not be considered in assessing whether an individual has a disability;
4. Clarify that an impairment that is episodic or in remission is a disability if it would substantially limit a major life activity when active;
5. Provide that an individual subjected to an action prohibited by the ADA (e.g., failure to hire) because of an actual or perceived impairment will meet the “regarded as” definition of disability, unless the impairment is transitory and minor;
6. Provide that individuals covered only under the “regarded as” prong are not entitled to reasonable accommodation; and
7. Emphasize that the definition of “disability” should be interpreted broadly.

## APPENDIX I:

### VISITATION DATA FROM INDIVIDUAL CHESAPEAKE BAY GATEWAY AND WATERTRAILS NETWORK SITES

#### Calvert Marine Museum, Solomons, MD

<b>Month</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
January	2711	2376	2438	3023	2838
February	3657	3029	2194	2173	2684
March	4082	4203	2941	3055	4081
April	4658	4757	4159	4955	4530
May	5818	5369	5581	6301	5647
June	6708	5782	7042	6221	5343
July	9305	9539	10830	10460	10654
August	7495	7177	8852	8420	7646
September	4381	4173	3701	4904	7204
October	6789	6123	7488	7188	13665
November	3470	2386	3341	3072	3996
December	4084	3208	3562	3085	3934
<b>Total</b>	<b>63,158</b>	<b>58,122</b>	<b>62,129</b>	<b>62,857</b>	<b>72,222</b>

#### Chesapeake Bay Marine Museum, St. Michaels, MD

<b>Month</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
January	no data	1143	963	711
February	no data	961	853	873
March	no data	1863	2301	1941
April	no data	3708	4290	3152
May	6797	5836	6533	5882
June	11349	8320	11000	8466
July	13031	11515	10339	9602
August	10101	7230	7067	8536
September	7951	7576	7227	4615
October	7516	4998	6850	5844
November	4535	4382	2496	2068
December	1185	1450	1134	1054
<b>Total</b>	<b>62,465</b>	<b>58,982</b>	<b>61,053</b>	<b>52,744</b>

**Elk Neck State Park, North East, MD**

<b>Month</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
January	5947	4114	4493	4309	5714	2860
February	12723	3224	3507	4382	3275	4005
March	32113	18781	22145	12255	9734	10276
April	60514	65794	80873	26391	24878	--
May	68034	85606	87493	37479	35571	--
June	67152	106420	36734	44763	40213	--
July	82897	111854	63080	55956	39539	--
August	87192	100231	52045	47790	45783	--
September	61320	91000	32744	40345	28655	--
October	55712	43115	16538	20493	24197	--
November	18882	26340	7717	7887	9181	--
December	8965	9530	3785	3612	2955	--
<b>Total</b>	<b>561451</b>	<b>666009</b>	<b>411154</b>	<b>305662</b>	<b>269695</b>	<b>--</b>

**Sandy Point State Park Annapolis, MD**

<b>Month</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
January	14134	29770	33906	34686	44480
February	8230	7353	8159	6756	16395
March	10030	11881	8143	13962	14215
April	22777	38935	30702	17567	
May	88478	97600	85077	34185	
June	70780	135430	123857	126666	
July	192740	201485	136640	138869	
August	152846	137135	124797	135130	
September	124165	104305	114230	56085	
October	28033	30442	48306	37154	
November	24768	23722	20894	33828	
December	52795	4050	50082	75979	
<b>Total</b>	<b>789776</b>	<b>822108</b>	<b>784793</b>	<b>710867</b>	<b>--</b>

**Trap Pond State Park, Laurel, DE**

<b>Month</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>
July	19642	12989	15586	4770	7209	
August	17465	14813	17775	10699	7218	
September	13446	22872	15248	4516	4005	
October	41404	15255	15520	7899	1602	
November	2538	13680	13937	14283	14569	
December	1562	9778	9952	15103	15405	
January	11844	21319	22385	8185	1118	
February	8643	10372	10890	896	3228	
March	13263	15916	15107	9329	3451	
April	11843	14211	17764	1560	14495	
May	10601	12721	3438	4050	4771	
June	12981	15577	3494	6408	7497	
<b>Total</b>	<b>165,232</b>	<b>179,503</b>	<b>161,096</b>	<b>87,698</b>	<b>84,568</b>	

**Virginia Living Museum, Newport News, VA**

<b>Month</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>
July	18350	24888	30275	23188	23157	31116
August	17661	20115	26280	19158	22349	29887
September	3399	8944	9399	8205	10108	8956
October	3932	6675	8385	6830	7476	6991
November	4146	6739	8616	6643	7527	8632
December	3273	5031	7053	7367	6816	9114
January	3405	7145	9959	8376	8542	10175
February	5156	9399	11430	8611	10996	11454
March	6254	12148	10296	9584	13263	10443
April	20327	10786	16478	16826	13185	15752
May	13073	8595	10019	9728	13851	--
June	16927	17407	15441	15559	19950	--
Summer Event	Swamp Creatures	New Museum/ Dinosaurs	Dinosaurs/ Scoop	Scoop/ Jamestown	Jamestown/ Dinos	--
<b>Total</b>	<b>115,903</b>	<b>137,873</b>	<b>163,631</b>	<b>140,075</b>	<b>157,220</b>	<b>--</b>

# **APPENDIX J: EXISTING AND POTENTIAL TRAIL PARTNERS**

## **CONTACTS AND RESOURCES**

### *Contacts*

The agencies and organizations listed below are *just some* of the existing or potential Trail partners.

#### **Federal Agencies**

##### **National Park Service**

*Chesapeake Bay Office:*

410 Severn Avenue

Annapolis, MD 21403

Phone: 1-800-YOUR-BAY (1-800-968-7229)

[www.nps.gov/cajo](http://www.nps.gov/cajo)

[www.smithtrail.net](http://www.smithtrail.net)

[www.baygateways.net](http://www.baygateways.net)

[www.nps.gov/stsp](http://www.nps.gov/stsp)

*Potomac Heritage National Scenic Trail Office:*

Phone: 304-535-4016

[www.nps.gov/pohe](http://www.nps.gov/pohe)

##### **Chesapeake Bay Program – U.S. Environmental Protection Agency (EPA)**

410 Severn Ave. Suite 109

Annapolis, MD 21403

Phone: 1-800-YOUR-BAY (1-800-968-7229); 410-267-5700

<http://www.chesapeakebay.net>

##### **National Oceanic and Atmospheric Administration (NOAA)**

*National Office:*

14<sup>th</sup> Street & Constitution Avenue, NW

Room 6217

Washington, DC 20230

Phone: 202- 482-6090

<http://www.noaa.gov>

*Chesapeake Bay Office:*

410 Severn Ave. Suite 107A

Annapolis, MD 21403

Phone: 410-267-5652

<http://chesapeakebay.noaa.gov/>

**U.S. Fish and Wildlife Service**

*National Office:*

1849 C Street, NW  
Washington, DC 20240  
<http://www.fws.gov>

*Northeast Regional Office:*

300 Westgate Center Drive  
Hadley, MA 01035-9589  
Phone: 413-253-8580 (National Wildlife Refuge System)  
Phone: 413-253-8328 (External Affairs)  
<http://www.fws.gov/northeast>

*Chesapeake Marshlands NWR Complex*

Blackwater National Wildlife Refuge  
2145 Key Wallace Drive  
Cambridge, MD 21613-9536  
Phone: 410-228-2692

*Patuxent Research Refuge*

12100 Beech Forest Road, Room 138  
Laurel, MD 20708-4036  
Phone: 301-497-5580

*Eastern Shore of Virginia NWR*

5003 Hallet Circle  
Cape Charles, VA 23310-1128  
Phone: 757-331-2760

*Great Dismal Swamp NWR*

3100 Desert Road  
Suffolk, VA 23434-8973  
Phone: 757-986-3705

*Potomac River NWR Complex*

14344 Jefferson Davis Highway  
Woodbridge, VA 22191-2716  
Phone: 703-490-4979

*Eastern Virginia Rivers NWR Complex*

P.O. Box 1030  
Warsaw, VA 22572-1030  
Phone: 804-333-1470

**U.S. Navy/DOD**

The Navy Museum  
Washington Navy Yard  
805 Kidder Breesse St. SE  
Washington, DC 20374-5060  
Phone: 202-433-3973

**State Agencies****Delaware Department of Natural Resources and Environmental Control**

Division of Parks and Recreation  
89 Kings Highway  
Dover, DE 19901  
Phone: 302-739-9235  
(<http://www.destateparks.com/>)

**Delaware Tourism Office**

99 Kings Highway  
Dover, DE 19901  
Phone: 1-866-284-7483  
<http://www.visitdelaware.com>

**Maryland Department of Natural Resources**

580 Taylor Avenue  
Tawes State Office Building  
Annapolis, MD 21401  
Phone: 410-260-8101  
<http://www.dnr.state.md.us>

**Maryland Historical Trust**

100 Community Place  
Crownsville, MD 21032-2023  
Phone: 410-514-7604

**Maryland Office of Tourism Development**

401 E. Pratt Street, Suite 1434  
Baltimore, MD 21202  
Phone: 1-866-639-3526  
[www.visitmaryland.org](http://www.visitmaryland.org)

**Chesapeake Bay Commission**

60 West Street, Suite 406  
Annapolis, MD 21401  
Phone: 410-263-3420  
[www.chesbay.va.state.us](http://www.chesbay.va.state.us)

**Virginia Department of Conservation and Recreation**

Zincke Bldg., Suite 302  
203 Governor Street  
Richmond, VA 23219  
<http://www.dcr.virginia.gov/>

*Planning & Recreation Resources*

Virginia Department of Conservation and Recreation,  
203 Governor Street, Suite 326  
Richmond, VA 23219-2094  
Phone: 804-786-1119

**Virginia Department of Historic Resources**

2801 Kensington Avenue  
Richmond, VA 23221  
Phone: 804-367-2323

**Virginia Tourism Corporation**

901 East Bryd Street  
Richmond, VA 23219-4048  
Phone: 1-800-847-4882  
[www.virginia.org](http://www.virginia.org)

**Eastern Shore of Virginia Tourism Commission**

Phone: 757-787-8268  
[www.esvatourism.org](http://www.esvatourism.org)

**Local Government**

**D.C. Planning and Development**

John A. Wilson Building  
1350 Pennsylvania Avenue NW,  
Washington, DC 20004

**Chesapeake Bay Commission**

60 West Street, Suite 406  
Annapolis, MD 21401  
410-263-3420

## **Tribal Organizations**

### **Maryland Commission on Indian Affairs**

Maryland Department of Human Resources  
301 West Preston Street, Suite 1500  
Baltimore, MD 21201  
Phone: 1-800-714-8813  
[kcolston@dhr.state.md.us](mailto:kcolston@dhr.state.md.us)

### **Accohannock Indian Tribe, Inc.**

28380 Crisfield-Marion Road  
Marion Station, MD 21838  
Phone: 410-623-2660  
[Accohannock@dmv.com](mailto:Accohannock@dmv.com)

### **Cedarville Band of Piscataway Indians, Inc.**

American Indian Cultural Center  
16816 Country Lane  
Waldorf, MD 20601  
Phone: 301-782-2224  
<http://www.piscatawayindians.org>

### **Nause-Waiwash Band of Indians, Inc.**

Elliots Island Road  
Vienna, MD 21667  
Phone: 410-376-3889  
[admin@turtletracks.org](mailto:admin@turtletracks.org)  
[www.turtletracks.org](http://www.turtletracks.org)

### **Pocomoke Indian Nation**

P.O. Box 687  
Mount Airy, MD 21771  
[TribalOffice@Pocomoke-Indian-nation.org](mailto:TribalOffice@Pocomoke-Indian-nation.org)  
[www.pocomoke-indian-nation.org](http://www.pocomoke-indian-nation.org)

### **Piscataway-Conoy Confederacy and Subtribes**

Ms. Mervin Savoy, Tribal Chair  
P.O. Box 1484  
La Plata, MD 20646  
Phone: 301-609-7625

**Virginia Council on Indians**

Chief William P. Miles, Chair

P.O. Box 1475

Richmond, VA 23218

Phone: 804-225-2084

<http://indians.vipnet.org>

[vci@governor.virginia.gov](mailto:vci@governor.virginia.gov)

Deanna Beacham, Program Specialist

[deanna@governor.virginia.gov](mailto:deanna@governor.virginia.gov)

**Rappahannock Tribe**

Chief G. Anne Richardson

5036 Indian Neck Road

Indian Neck, VA 23148

Phone: 804-769-0260 (Tribal Office)

**Non-profit Organizations****The Conservation Fund**

*National Office:*

1655 N. Fort Meyer Drive

Suite 1300

Arlington, VA 22209-3199

Phone: 703-908-5812

[www.conservationfund.org](http://www.conservationfund.org)

*\*\*Annapolis Office:*

410 Severn Avenue, Suite 204

Annapolis, MD 21403

Phone: 443-482-2826

**Friends of the John Smith Chesapeake Trail** <http://www.friendsofthejohnsmithtrail.org/>

After June 30, 2009: <http://chesapeaketrails.org>

**National Geographic Society**

1145 17<sup>th</sup> Street

N.W. Washington, DC 20036-4688

Phone: 202-857-7140

**Chesapeake Bay Foundation**

Philip Merrill Environmental Center

6 Herndon Avenue

Annapolis, MD 21403

Phone: 410-268-8816

<http://www.cbf.org>

**James River Association**

9 South 12<sup>th</sup> Street, 4<sup>th</sup> floor  
Richmond, VA 23219  
Phone: 804-788-8811

**Sultana Projects, Inc.**

105 South Cross Street  
P.O. Box 524  
Chestertown, MD 21620  
Phone: 410-778-5954  
[www.sultanaprojects.org](http://www.sultanaprojects.org)

**Mount Vernon Viewshed Protection Program**

The Accokeek Foundation  
3400 Bryan Point Road  
Accokeek, MD 20607  
Phone: 301-283-2410

**Southern Maryland Heritage Area Consortium**

PO Box 745  
Hughesville, MD 20637  
Phone: 301-274-4083  
[SoMdHeritage@tccsmd.org](mailto:SoMdHeritage@tccsmd.org)  
[www.SouthernMdIsFun.com](http://www.SouthernMdIsFun.com)

**Friends of Chesapeake Gateways**

P.O. Box 2861  
Easton, MD 21601  
Phone: 202-333-0737  
[friendsofchesapeakegateways@gmail.com](mailto:friendsofchesapeakegateways@gmail.com)

**Chesapeake Bay Maritime Museum**

213 N. Talbot Street  
P.O. Box 636  
St. Michaels, MD 21663  
Phone: 410-745-2916

**Potomac Conservancy**

8601 Georgia Avenue, Suite 612  
Silver Springs, MD 20910  
Phone: 301-608-1188

## **APPENDIX K:**

### **PRELIMINARY LIST OF CHESAPEAKE BAY GATEWAYS AND WATERTRAILS NETWORK SITES ON OR PROXIMATE TO THE TRAIL**

#### *Maryland*

Annapolis Maritime Museum  
Baltimore Visitor Center  
Blackwater National Wildlife Refuge  
Calvert Cliffs State Park  
Calvert Marine Museum  
C & O Canal National Historical Park  
Chesapeake Bay Maritime Museum  
Chesapeake Biological Laboratory  
Choptank and Tuckahoe Rivers Water Trail  
Dogwood Harbor  
Eastern Neck National Wildlife Refuge  
Elk Neck State Park  
Fort McHenry National Monument & Historic Shrine  
Fort Washington Park  
Greenwell State Park  
Gunpowder Falls State Park  
Historic Annapolis City Dock  
Historic London Town and Garden  
Historic St. Mary's City  
Janes Island State Park  
Jefferson Patterson Park & Museum  
King's Landing Park  
Marshy Point Park  
Monocacy Water Trail  
Mount Harmon Plantation  
North Point State Park  
Patuxent Research Refuge  
Patuxent River Park & Jug Bay  
Piney Point Lighthouse & Park  
Piscataway Park  
Point Lookout State Park  
Potomac River Water Trail  
Sandy Point State Park  
Smallwood State Park

Smith Island Center  
Solomons Visitor Information Center  
Sotterley Plantation  
St. Clement's Island and Museum  
Susquehanna State Park

*Virginia*

Belle Island State Park  
Caledon Natural Area  
Cape Charles Historic District  
Chickahominy Riverfront Park  
Chippokes Plantation State Park  
Dutch Gap Plantation State Park  
Eastern Shore of Virginia National Wildlife Refuge  
First Landing State Park  
George Washington Birthplace  
Gloucester Point Beach Park  
Great Falls Park  
Hoffler Creek Wildlife Preserve  
Kiptopeke State Park  
Jamestown Island  
Lawrence Lewis, Jr. Park  
Leesylvania State Park  
Lower James River Water Trail  
Mason Neck National Wildlife Refuge  
Mason Neck State Park  
Mathews Blueways Water Trail  
Mattaponi and Pamunkey Water Trail  
Nauticus National Maritime Center  
Occoquan Bay National Wildlife Refuge  
Occoquan Water Trail  
Pamunkey Indian Reservation  
Potomac Gateway Welcome Center  
Potomac River Water Trail  
Powhatan Creek Blueway  
Rappahannock River Valley National Wildlife Refuge  
Rappahannock River Water Trail  
Riverbend Park  
The Mariner's Museum  
Virginian Eastern Shore Water Trails  
Virginia Living Museum  
Washington Ferry Farm  
Westmoreland State Park  
York River State Park

## **APPENDIX L: CHESAPEAKE BAY INTERPETIVE BUOY SYSTEM**

### ***CHESAPEAKE BAY INTERPRETIVE BUOY SYSTEM (CBIBS)***

#### **High-Tech Buoys Mark the Historic Trail**

The innovative buoys that mark points along the Captain John Smith Chesapeake National Historic Trail are especially “smart.” As part of the National Oceanic and Atmospheric Administration’s (NOAA) Chesapeake Bay Interpretive Buoy System (CBIBS), these buoys

- deliver near-real-time information on weather and water conditions, such as wind, waves, and currents;
- collect and transmit many other kinds of data for scientific and educational uses, including water-quality indicators; and
- provide trail users with navigational information plus descriptions of that place on the Bay 400 years ago.

These smart buoys are accessible to anyone at any time via the Internet ([www.buoybay.org](http://www.buoybay.org)) and by toll-free phone (877-BUOY BAY).

#### **What’s Special about These Buoys?**

Marking the first national water trail requires using different methods than are used to mark a land-based trail. To mark the Captain John Smith Chesapeake National Historic Trail, the NOAA Chesapeake Bay Office (<http://chesapeakebay.noaa.gov/>) devised a buoy system that could transmit observational data for trail users, collect water-quality and other scientific measurements for monitoring the health of the Bay, and communicate current and historical information for the public and educators.

While the buoys look similar to other navigational buoys around the Bay, the CBIBS “smart buoys” are loaded with sensors to collect a range of meteorological, physical, water quality, water level, chemical, biological, optical, and acoustic measurements. The information is relayed in near real time from the buoys to the Internet using wireless technology.

CBIBS is the only operational buoy system in the Bay dedicated to maintaining the broad range of measurements needed to track Bay restoration progress. This data is also part of the broader Chesapeake Bay Observing System, (<http://www.cbos.org/>). NOAA worked closely on the design of the system with the National Park Service, Friends of the Captain John Smith Chesapeake National Historic Trail, The Conservation Fund, the Chesapeake Bay Foundation, National Geographic, Sultana Projects, and Verizon Wireless. These partners continue to help expand CBIBS capability for scientists, boaters, educators, travelers of the Smith trail, and other Bay users.

The immediacy and accessibility of information from these smart buoys helps people navigate the Bay, improve marine safety, and learn about the Captain John Smith Chesapeake National Historic Trail. However, the long-term value of these buoys will be found in applying the data to science-based Bay restoration efforts and for educating people to be better stewards of the Chesapeake Bay.

### **Who Uses These Buoys?**

The popularity of CBIBS has grown rapidly since the first buoys were deployed in 2007 to coincide with the launch of the Captain John Smith Chesapeake National Historical Trail. Here are some of the uses for these smart buoys:

#### **Boating and Fishing:**

Both recreational and commercial interests value the buoys for navigation information and current readings on wind, weather, wave height, and currents. Data from the buoys help boaters make safe choices before venturing into the open waters of the Bay.

#### **Travelers on the Captain John Smith Chesapeake National Historical Trail:**

CBIBS originated as a system to mark the Captain John Smith Chesapeake National Historical Trail. The buoys help modern trail explorers learn more about the environment of the Bay while discovering what Captain Smith would have seen as he passed near a buoy location 400 years ago. In addition to marking locations and transmitting observations that enable boaters to plan a safe experience on the Bay, the buoys interpret geography and history.

Today you can cruise or paddle to the location of a buoy and contact it on your cell phone or Internet-accessible device, and learn about that very place on the Chesapeake Bay in 1608. Because the buoys are accessible to anyone with a phone or Internet connection, land travelers are using them, too. You can take a “virtual trip” to any buoy location from your computer to learn about the Bay in Smith’s time and to help plan your own visit to the trail.

You can contact the buoy by toll-free phone (877-BUOY BAY) or via the Internet ([www.buoybay.org](http://www.buoybay.org)) to learn about the history and environment of that place.

As the Captain John Smith Chesapeake National Historic Trail develops, there will be land-based sites where interpretive kiosks and exhibits will tie into CBIBS to complement the geographic and historical information the buoys provide. An interpretive kiosk is already in place on the deck of the Nauticus museum in Norfolk, Virginia, within sight of the Elizabeth River CBIBS buoy.

#### **Teachers and Students:**

The Chesapeake Bay Interpretive Buoy System (CBIBS) is a valuable tool for teachers and students in many subject areas, such as science, biology, mathematics, and history. CBIBS is especially important in teaching estuarine concepts for better understanding the Chesapeake Bay—North America’s largest estuary. Students can use near-real-time data streams and archived data from CBIBS in their classrooms. The historical adventures of

Captain John Smith on the Bay and its tributaries interest students in learning how the Bay has changed since the time of Smith's explorations. This provides educators with exciting new ways to prepare the next generation of Bay stewards.

The NOAA Chesapeake Bay Office is working with partners to develop educational content based on CBIBS data. Visit the CBIBS website ([www.buoybay.org](http://www.buoybay.org)) to learn about a place-based curriculum that brings real-time and archived CBIBS data into K-12 classrooms. "Chesapeake Explorations," developed in partnership with NOAA's National Estuarine Research Reserve System (NERRS) (<http://www.nerrs.noaa.gov/>), features specific Chesapeake Bay modules for the Estuaries 101 curriculum.

### **Scientific Research and Bay Restoration:**

Most people will use observations from the buoys to help them plan a safe experience on the Bay and as an interesting way to learn about the Captain John Smith Chesapeake National Historic Trail and the Bay environment. But for scientists—especially those working to restore the Chesapeake Bay—the data collected by CBIBS is a treasure trove.

CBIBS buoys collect data on meteorological (wind speed and direction, air temperature, barometric pressure, relative humidity); GPS (horizontal position); near-surface water quality (water temperature, conductivity, dissolved oxygen, Chlorophyll A, turbidity); wave height (significant and maximum), direction, and period. Other data-collecting sensors may be added in the future.

CBIBS data contributes to the broader Chesapeake Bay Observing System, (<http://www.cbos.org/>) and the Integrated Ocean Observing System. ([http://www.ocean.us/what\\_is\\_ioos](http://www.ocean.us/what_is_ioos)) The CBIBS buoys collect data on a wide variety of environmental parameters from locations on the water. The real-time and stored data from these measures help scientists analyze changes in the Bay over time.

This information is critically important to Bay restoration efforts coordinated through the Chesapeake Bay Program (<http://www.chesapeakebay.net/>) and to various partners in monitoring and raising awareness for Bay health. The Chesapeake Bay Foundation ([http://www.cbf.org/site/PageServer?pagename=exp\\_sub\\_expeditions](http://www.cbf.org/site/PageServer?pagename=exp_sub_expeditions)), for example, uses CBIBS to compare the current state of the Bay to the benchmark of the rich and balanced Bay that Captain John Smith described in 1608.

**Where Are These Buoys?**

Six CBIBS buoys are stationed in the Chesapeake Bay along the Captain John Smith Chesapeake National Historic Trail.

CBIBS buoys launched in 2007:

- James River near Jamestown, VA
- Mouth of the Potomac River
- Mouth of the Patapsco River near Baltimore, MD.

CBIBS buoys launched in 2008:

- Rappahannock River near Stingray Point, VA
- Elizabeth River near Norfolk, VA
- Susquehanna River near Havre de Grace, MD



This sample planning matrix depicts how each category within the matrix may be addressed.

**SAMPLE Interpretive Planning Matrix – Site “X”**

Project Description	Lead Staff	Target Date for Completion						Cost Estimate	Notes
		2009	2010	2011	2012	2013	Future		
Develop website that describes Site X's mission, key features, visitor opportunities and linkages to the Trail.	Jeff		X					\$25,000	Jeff will work with contractor to develop website. Site should include links to Trail website and other partner websites.
Develop a map and guide (or series) for Site X describing key resources and visitor opportunities related to the Trail.	Kim			X				\$10,000	Target amount: 25,000 copies.
Produce a PowerPoint presentation that provides an overview of Site X and resources related to the Trail; include a site-specific menu of visitor opportunities.	Beth			X				\$4,000	Program will be adaptable to better serve specific audiences and/or forums.
Develop 5 wayside exhibits	Lori				X			\$10,000	Topics to include: Native American lifeways; Smith's travels associated with Site X; key wildlife; wetland restoration; and Leave No Trace principles.
Create 4 poster guides associated with Site X's themes that relate to the Trail.	Dave						X	\$8,000	Print foldable and flat versions for distribution.



## APPENDIX N:

# TEMPLATE FOR CHESAPEAKE BAY GATEWAYS NETWORK MEMORANDUM OF UNDERSTANDING

## Memorandum of Understanding

Between

[Your Organization](#)

&

The National Park Service

WHEREAS, the Chesapeake Bay is an internationally recognized resource of outstanding significance and the United States has entered into a partnership with states, the District of Columbia and others to conserve and restore the Bay through the Chesapeake Bay Program;

WHEREAS, the National Park Service, as a Chesapeake Bay Program partner, is committed to assisting in enhancing interpretation of, and access to, Bay resources for the purposes of advancing and supporting Bay conservation;

WHEREAS, the Chesapeake Bay Initiative Act of 1998 (P.L. 105-312, Sections 501-2) calls for: (a) the National Park Service to facilitate development of a network of Chesapeake Bay gateways, water trails and other connecting routes in cooperation with other Federal agencies, state and local governments, non-profit organizations and the private sector; and (b) a technical and financial assistance program to aid development of the Gateways network;

WHEREAS, the National Park Service, in cooperation with the multi-agency/organization Working Group established by the Chesapeake Bay Program, outlines in a *Framework* and other supporting materials how the Chesapeake Bay Gateways and Watertrails Network will develop and how important Bay-related resource sites may participate as designated Chesapeake Bay Gateways;

WHEREAS, [\[Your Gateway\]](#), located on [\[location\]](#), provides access for people to experience, enjoy, learn about and contribute to Bay-related natural, cultural, historical and recreational resources and their role in the overall Bay story;

WHEREAS, [Your Gateway] has been nominated as a Gateway site and the nomination has been reviewed and recommended by the Gateways Network Working Group;

NOW, THEREFORE, [Your Gateway] is formally designated as a Gateway Site participating in the Chesapeake Bay Gateways and Watertrails Network and benefiting from the mutual commitments identified below:

[Your Organization] commits to sustaining [Your Gateway] as a Gateway site in the Chesapeake Bay Gateways and Watertrails Network and agrees to advance the purposes of the Gateways Network by adhering to the following commitments and principles:

1. Helping advance the goals of the Gateways Network: (a) enhancing place-based interpretation and education about the Bay and its related resources to increase public awareness and promote individual stewardship of the Chesapeake Bay region; (b) facilitating access to the Bay and related resources; and (c) fostering conservation and restoration of the Bay.
2. Working to interpret the resources and stories associated with [Your Gateway] through programs, exhibits and materials which relate those resources to the Chesapeake Bay and relevant Gateways Network overarching, primary and sub-themes.
3. Operating [Your Gateway] to provide appropriate public access for Bay-related natural, cultural, historical, recreational resources at the site, in accordance with sound resource management considerations and the Americans with Disabilities Act. The site shall be open to the public for the maximum number of days per week feasible, given seasonal visitation patterns and operational limitations, but must be publicly accessible at least four days per week, including at least one weekend day, during your high visitation season.
4. Displaying and maintaining the Gateways Network logo and signage in a prominent location at the site entry or primary visitor facilities.
5. Where appropriate, working to include the Gateways Network logo or graphics in brochures, maps, guides, interpretive exhibits or signage.
6. Providing descriptive information on the site's resources and themes for inclusion within the Gateways Network web site and establishing a link to the Gateways Network home page from the [Your Gateway] 's web site.
7. Participating in physical or programmatic linkages with other existing or potential sites and routes in the Gateways Network that are geographically or thematically related.
8. Assisting in the marketing of other Gateways and the Chesapeake Bay Gateways and Watertrails Network to visitors to [Your Gateway] so as to assist their further explorations of Chesapeake Bay resources and stories. This will include distributing the Gateways Network Map and Guide and orienting visitors to the use of the Map and Guide, the availability of the Gateways web site, and opportunities to explore their interests at other Gateways.

9. Promoting and interpreting conservation stewardship of Bay-related natural and cultural resources.
10. Encouraging low-impact use of natural, cultural, historical and recreational resources associated with the site.
11. Working to manage the site in ways that improve watershed health through practices such as green building design & construction, environmentally sensitive design (ESD), low impact development (LID), and/or conservation landscaping to the maximum extent practicable.
12. Identifying and working to develop opportunities for involving volunteers in on-going resource restoration or conservation activities in order to build broader involvement in Bay conservation overall.

The National Park Service, in partnership with the Network Working Group, agrees to foster development of the Chesapeake Bay Gateways and Watertrails Network and [Your Gateway]'s participation in it by adhering to the following principles and commitments:

1. Expanding and maintaining the Gateways Network web site as a major tool for promoting the Network and all participating Gateways and including [Your Gateway] in the web site.
2. Developing and maintaining a Gateways Network technical assistance tool kit available to designated Gateways on the Network web site.
3. Including [Your Gateway] in Network maps and guides as they are developed.
4. Supplying a Gateways Network sign for [Your Gateway] and providing access to Network logos and related graphic materials.
5. Facilitating linkages with other potential or existing Network locations, including hubs and regional information centers which orient and direct visitors to Gateway sites.
6. Consulting with the [Your Organization] regarding needs or eligibility for technical or financial assistance to further development of the [Your Gateway] as a member of the Network.
7. Providing regular updates via the Gateways web site, email or other means on development of the Network, and related issues and opportunities.
8. Including [Your Gateway] staff in round-tables, and other forums for communicating about development of the Gateways Network.

This Memorandum of Understanding and the commitments of the parties hereunder are subject to the availability of funding. Nothing contained herein shall be construed as binding the parties

to expend in any one fiscal year any sum in excess of appropriations or administratively allocated for the purpose of this agreement for the fiscal year, or to involve the parties in any contract or other obligation for the further expenditure of money in excess of such appropriations or allocations. In addition, nothing contained herein shall be interpreted as obligating the National Park Service to provide funding, compensation or reimbursement pursuant to this Memorandum of Understanding.

The National Park Service and [Your Organization] make this Memorandum of Understanding, and the designation of [Your Gateway] as a Gateway Site, effective upon the date of the last signature below. The parties also agree to review this Memorandum on a triennial basis.

***For [Your Organization]:***

---

[Your Organization CEO]

---

Date

***For the National Park Service:***

---

John Maounis, Superintendent  
Chesapeake Bay Gateways and Watertrails Network

---

Date

## APPENDIX O:

# TEMPLATE FOR CAPTAIN JOHN SMITH CHESAPEAKE NATIONAL HISTORIC TRAIL MEMORANDUM OF UNDERSTANDING

*Memorandum of Understanding  
Between  
[REDACTED]  
&  
The National Park Service*

### **I. Background**

WHEREAS, the Chesapeake Bay is an internationally recognized resource of outstanding significance and the United States has entered into a partnership with states, the District of Columbia and others to conserve and restore the Bay through the Chesapeake Bay Program;

WHEREAS, the National Park Service, is committed through agreements and statutory requirements to support and advance conservation, restoration, public access, education and interpretation of the Chesapeake Bay and its natural, cultural and historical resources;

WHEREAS, Public Law 109-418 amends the National Trails System Act to designate the Captain John Smith Chesapeake National Historic Trail (hereafter also referred to as CAJO or Trail) along the Chesapeake Bay and its tributaries in Virginia, Maryland, Pennsylvania, Delaware, and in the District of Columbia that traces the 1607 – 1609 exploratory voyages of Captain John Smith

WHEREAS Section 5 (25) of PL 90-543, the National Trails System Act authorizes the National Park Service to provide technical and financial assistance to partner organizations along National Historic Trails to aid in the development of the trails;

WHEREAS, [REDACTED], located on [REDACTED], provides access for people to experience, enjoy, learn about and contribute to Bay-related natural, cultural, historical and recreational resources along the Trail;

WHEREAS, [REDACTED] has been nominated as a Trail partner site and the nomination has been reviewed and approved by the National Park Service;

NOW, THEREFORE, [REDACTED] is formally designated as a Trail partner site participating in the Captain John Smith Chesapeake National Historic Trail and benefiting from the mutual commitments identified below:

### **II. The [REDACTED] agrees to:**

1. Sustain [REDACTED] as a Trail partner site along the Captain John Smith Chesapeake National Historic Trail.

2. Cooperate with the National Park Service and other Trail partners, including the Friends of the John Smith Chesapeake Trail to advance the purposes of the Trail.
3. Advance the goals of the Trail: (a) enhancing place-based interpretation and education about the Bay and its related resources to increase public awareness and promote individual stewardship of the Chesapeake Bay region; (b) facilitating access to the Bay and related resources; and (c) fostering conservation and restoration of resources in the Bay region.
4. Interpret the resources and stories associated with [REDACTED] through interpretive and educational initiatives, programs, exhibits and materials which relate those resources to the Chesapeake Bay and the three core themes of the Trail: (a) the exploratory voyages of the Chesapeake Bay and its tributaries by Captain John Smith and his crew in 1607-1609; (b) American Indian societies and cultures of the 17<sup>th</sup> century; (c) the natural history of the Bay (both historic and contemporary).
5. Provide access to the Bay and tributaries from [REDACTED].
6. Provide appropriate public access to other Trail-related natural, cultural, historical, and recreational resources at the site, in accordance with sound resource management considerations and the Americans with Disabilities Act.
7. Maintain a schedule of operation to provide maximum public access, given seasonal visitation patterns and operational limitations. At a minimum, the site must be publicly accessible at least 4 days per week, including at least 1 weekend day, during the high visitation season.
8. Display and maintain the Trail logo and trail-wide orientation signage in a prominent location at the site entry or primary visitor facilities.
9. Include the Trail logo in brochures, maps, guides, interpretive exhibits or signage as appropriate. Trail partners must obtain prior written NPS approval for use of the Trail logo for promotional materials such as advertisements, merchandise sales, or marketing publications.
10. Obtain prior NPS approval for any public information releases (including advertisements, solicitations, brochures, and press releases) that refer to the Department of the Interior, the Captain John Smith Chesapeake NHT, the Chesapeake Bay Gateways and Watertrails Network, or any NPS employee [REDACTED].
11. Provide descriptive information on the site's resources, themes and operations for inclusion within the Trail's web sites. Establish a link to the Trail home page from the site's web site.
12. Ensure physical or programmatic linkages with other existing or potential sites and segments on the associated with the Trail. Promote networking opportunities with other sites.
13. Assist in marketing the Trail and other sites and segments of the Trail to visitors. Assist visitors' further explorations of Chesapeake Bay resources and stories. This will include, but is not limited to distributing the Trail's brochures, orienting visitors to the availability of the Trail; promoting awareness of the Trail's web site, and opportunities to explore their interests at other sites and segments along the Trail.
14. Promote and interpret conservation stewardship of Bay-related natural and cultural resources through site management, programming, marketing and citizen involvement.
  - a) To the maximum extent practicable, manage the site in ways that improve watershed health through practices such as green building design and construction, environmentally sensitive design (ESD), low impact development (LID), recycling, and/or conservation landscaping.
  - b) Ensure low-impact use of natural, cultural, historical and recreational resources associated with the site.
  - c) Incorporate conservation messaging in interpretive, educational and marketing initiatives and materials.
  - d) Identify and develop opportunities for involving volunteers in on-going resource restoration or conservation activities in order to broaden involvement in Bay conservation.

### **III. The National Park Service agrees to**

1. Promote and support development of the Captain John Smith Chesapeake National Historic Trail and [REDACTED]'s participation as a designated Trail partner.
2. Provide site/segment and interpretive planning assistance and other forms of technical assistance as funds and staffing permit. .
3. Provide regular updates via the Trail web site, email or other means on development of the Trail, and related issues and opportunities.
4. Assist with the identification, scoping and development of high priority projects at [REDACTED].
5. Assist [REDACTED] to collaborate with NPS, the Friends of the John Smith Chesapeake Trail, and other trail partners on projects, marketing and promotion, volunteer efforts, and other mutually beneficial efforts.
6. Provide opportunities for the participation of [REDACTED]'s staff in regional meetings and workshops focused on capacity building, project collaboration, networking, resource stewardship, marketing, etc.
7. Develop and maintain technical assistance tool kit(s) available to [REDACTED]'s staff on the CAJO web site.
8. Expand and maintain the Trail web site as a major tool for promoting the Trail and all participating Trail partners including [REDACTED]. Link from CAJO website to [REDACTED]'s website.
9. Implement a variety of marketing initiatives to promote the Trail and Trail partners. These initiatives may include media events, promotional packages, special public events, and feature articles.
10. Include [REDACTED] in Trail brochures and interpretive and marketing material as they are developed.
11. Develop and widely distribute Trail-wide brochures and other interpretive and marketing materials to promote and advance the Trail. Include [REDACTED] in Trail-wide materials.
12. Supply a Trail sign for [REDACTED] and provide access to Trail logos and related graphic materials.
13. Facilitate linkages with other potential or existing Trail locations which orient and direct visitors to Trail sites. Provide regular updates via the Trail web site, email or other means on development of the Trail, and related issues and opportunities.
14. Promote networking and collaborative opportunities among Trail partners to enhance cooperation and the sharing of resources. Include Your [REDACTED]'s staff in meetings and other discussions, and other forums for communicating about development and promotion of the Trail.
15. Provide periodic training opportunities and associated materials for Trail partners via conferences, workshops, online sessions or other means.
16. Promote continued research related to the three core themes of the Trail: (a) the exploratory voyages of the Chesapeake Bay and its tributaries by Captain John Smith and crew in 1607 – 1609; (b) American Indian societies and cultures of the 17<sup>th</sup> century; (c) the natural history of the Bay (both historic and contemporary).
17. Develop and promote evaluation tools and techniques to measure the effectiveness of Trail-wide and site-specific initiatives.

### **IV. Term**

This Memorandum of Understanding (MOU) shall be effective upon the date of the last signature below and shall remain in effect for five (5) years, subject to automatic renewal for subsequent terms of equal length. Either party may terminate this MOU, at any time, upon 60 days written notice to the other party.

**NOTE:** This Memorandum of Understanding and the commitments of the parties hereunder are subject to the availability of funding. (See General Provision B.) In addition, nothing contained herein shall be interpreted as obligating the National Park Service to provide funding, compensation or reimbursement pursuant to this Memorandum of Understanding.

**V. GENERAL PROVISIONS**

- A. Non-Discrimination: During the term of this MOU, the Partners will comply with applicable laws prohibiting discrimination on the grounds of race, color, national origin, disability, religion, or sex in employment and in providing for facilities and services to the public, provided that by entering into this Agreement the Foundation does not agree to be subject to any laws or regulations to which it is not already subject by operation of law.
  
- B. NPS Appropriations: Nothing contained in this MOU shall be construed as binding the NPS to expend in any one fiscal year any sum in excess of appropriations made by Congress, and available for the purposes of this MOU for that fiscal year, or as involving the United States in any contract or other obligation for the future expenditure of money in excess of such appropriations or allocations.
  
- C. Member of Congress: Pursuant to 41 U.S.C. § 22, no Member of Congress shall be admitted to any share or part of any contract or agreement made, entered into, or adopted by or on behalf of the United States, or to any benefit to arise thereupon.

**VI. Authorizing Signatures**

The National Park Service and [redacted] make this Memorandum of Understanding, and the designation of [redacted] as a Trail partner, effective upon the date of the last signature below.

***For [redacted]:***

—

---

[redacted]

Date

***For the National Park Service:***

---

John Maounis, Superintendent  
Captain John Smith Chesapeake National Historic Trail

Date

## APPENDIX P:

### WATER TRAIL TOOLBOX

#### Water Trail Toolbox

#### Chesapeake Bay Gateways and Watertrails Network

*March 10, 2005 Acknowledgement: Much of the information contained in this toolbox is based on materials developed and compiled by North American Water Trails, Inc., a nonprofit organization in partnership with the Chesapeake Bay Gateways Network. This text was edited and amended by Bruce Hopkins, Bob Campbell and Dave Lange.*

#### How to Plan, Build, and Manage a Water Trail

Establishing a water trail seems like an obvious and natural thing to do to foster interest in the Chesapeake Bay and its tributaries. It takes a lot of hard work, determination, and dedication to create and maintain a water trail.

To help you, the Chesapeake Bay Gateways Network provides these step-by-step guidelines—the ABCs of planning, building, and managing a water trail. Each of the three sections has a brief opening page and a list of links that examine the subjects in greater detail.

##### What Is a Water Trail?

Water trails connect scenic and historical sites along a riverway, lakeshore, or bay coastline for the recreational and educational benefit of paddlers, boaters, and other water users.

Water trails typically include points of interest, access locations, day-use sites, and camping areas that are shown in a map-and-guide brochure or booklet.

Trails may include both public and private lands with varying restrictions. Camping, for instance, may be restricted on some trails to those traveling by self-propelled craft and be open on other trails to powerboat users.

##### Why Establish a Water Trail?

Water trails apply and promote the following principles:

- **Partnerships:** Private property owners, land managing agencies, regulatory agencies, user groups, and local businesses form partnerships to create and maintain a water trail.
- **Volunteerism:** Dedicated individuals and volunteer organizations do most of the work creating, promoting, and maintaining water trails.
- **Stewardship:** Water trails espouse minimum-impact practices and the Leave No Trace Code of Outdoor Ethics for waterways and adjacent lands. They cultivate stewards of the water, land, vegetation, wildlife, and other resources.
- **Education:** Serving as outdoor classrooms, water trails promote an awareness of the natural and cultural attributes of the Chesapeake Bay and its tributaries through experiences involving the senses.

- **Conservation:** Water trail activities support the conservation of the aquatic ecosystem and contiguous lands and build a constituency of resource protection and restoration advocates and watchdogs.
- **Connecting People and Places:** Water trails connect individuals, families, and groups with a variety of hiking trails, bikeways, greenways, museums, historic sites, parks, and preserves. They cultivate a sense of place and love of community.
- **Diversity:** Water trails benefit the able-bodied and the disabled, the young and the old, the disadvantaged and the advantaged. Through shared work and play, they foster tolerance and understanding.
- **Wellness and Well-being:** Water trails provide wholesome, fresh-air activities that promote the physical fitness and health of participants.

## A. Planning a Water Trail

Turning the idea of a water trail into a reality will depend on the thoroughness of your planning. This section provides advice on getting started, developing grassroots support, and drafting a plan for building the trail.

### 1. Getting Started

Here are a few tips on how to launch your water trail project:

#### Establish a Core Group

Form a strong core group of similarly inclined individuals and representatives of organizations who are keenly interested in establishing a water trail and will share in the workload.

#### Create a Vision

Develop a vision statement that describes the desired future condition of the water trail and how the group wants to proceed. Members of the core group may have different ideas on what the trail actually should be. Reaching a consensus on a vision statement will help build a sense of ownership and commitment.

#### Define the Mission

Create a mission statement that defines the role of your group in reaching your vision for the water trail. This statement can help keep the group focused and introduce and explain it to others. The mission statement should be clear and concise—ideally, no more than 25 words.

#### Establish Partnerships

Use the vision and mission statements to establish partnerships with local governments, community organizations, state natural resource agencies, private property owners, and user groups such as paddlers' clubs and anglers. Partners should be willing to share in the responsibility for getting the actual work done.

## Form an Advisory Committee

Create an advisory, or steering, committee composed of the core group and the initial key partners to generate a long-term development and management plan for the trail and if appropriate, formally establish a permanent water trail organization.

### 2. Garnering Community Support

With the basic organization in place, the advisory committee should begin expanding the constituency and supporters for the water trail. The trail will not succeed without widespread community support. It's time to identify stakeholders, gather data supporting the initiative, recruit volunteers, and raise funds.

## Identify Stakeholders

Identify all individuals and groups in your community that could have an interest in or be affected by the creation of the water trail. They are your stakeholders. Some stakeholders may become partners—those who will work jointly on shared goals. Others may become sponsors—those who support the trail with funds, resources, or expertise. Some may become opponents of the trail. To be successful, you must understand and address the interests and concerns of all of these stakeholders.

## Gather Data

Conduct a feasibility study. Identify needs, problems, and opportunities. Determine the funds and other resources required to establish and maintain the trail. Create a development plan and budget. Your best case for your trail system will be one that articulates benefits to the community.

## Communicate with Stakeholders

Conduct face-to-face interviews with community leaders, meet with focus groups, mail a survey to all landowners that may be affected by the proposed water trail, conduct public forums and meet one-on-one with water trail opponents. Develop a variety of ways to communicate with the different kinds of stakeholders.

## Establish a Formal Organization

Consider establishing, after gaining sufficient community support, a permanent organization to implement the development and management plans and to carry out fundraising and personnel initiatives, including the hiring of a professional staff. Members of the advisory committee may well become officers and directors of the new organization. An alternative to establishing a formal organization would be to have one of your partners “adopt” the water trail as an ongoing project.

## Recruit Volunteers

Enlist volunteers to carry out day-to-day stewardship tasks and special development projects. Your organization cannot succeed without a solid corps of volunteers. Use their expertise so their tasks are meaningful. Recognize their contributions.

## Raise Funds

Develop a fundraising plan based on projects in your development plan. Focus first on obtaining contributions of money, services, products, and labor from the local community. Then, extend your fundraising efforts to a larger, regional audience and to state and federal agencies and foundations that provide grants.

## Identifying Stakeholders

Water trails touch many shores: private landowners, government agencies, organizations, towns, businesses, conservation and recreation groups, historical and cultural groups, paddlers and other water sports enthusiasts. All of them may be stakeholders—individuals and groups that may affect or be affected by the proposed trail.

Stakeholders provide vital information about what is important to them. Your success may well depend on how much you involve them in the planning process, in resolving conflicts, and in developing a consensus.

Sometimes one stakeholder will view another stakeholder's need as a problem while a third will look at it as an opportunity or a different kind of need. For instance, a canoe paddlers' group might propose increasing the number of access points to the waterway. A farmer or riparian landowner may oppose adding access points because paddlers might camp on private lands and litter the landscape. A third stakeholder, however, might view increased usage as an opportunity to open a bed and breakfast or to establish a community park along the waterway.

The advisory, or steering, committee should identify the stakeholders and make notes of key players. Be sure to include those who may oppose the water trail project as well as those who are likely to support it.

Several key groups of stakeholders should be approached:

### Adjacent Landowners

Individuals, businesses, and public agencies that own land along the waterway will definitely have a vested interest in the water trail project. Approach them early in the planning process. Gaining their insights, addressing their problems and needs, and building their support will pay huge dividends later on.

### Trail Users

Water trails can accommodate boaters, fishermen, swimmers, and streamside users such as hikers, cyclists, hunters, horseback riders, picnickers, campers, and birdwatchers. Identify and approach paddlers' clubs and powerboat associations, outfitters and guides, cycling and hiking groups, naturalist and sportsmen groups, boating shops and marinas. Listen to their suggestions and encourage them to become active participants in the planning process.

### Governmental Agencies

Federal, state, and local agencies will be very important partners. Enlist the help of conservation, recreation, and transportation officials who manage programs that might assist in developing the trail. They may be able to provide advice about resource inventories, access facility development, technical and financial assistance programs, and environmental or historic compliance issues.

These state program officials will help you coordinate with other conservation efforts near the water trail, and will help you connect with parallel efforts on other water trails in your state to learn from their experiences.

- Maryland Department of Natural Resources – Greenways and Water Trails Program (<http://www.dnr.state.md.us/greenways/watertrails.html>)
- New York Department of Environmental Conservation (<http://www.dec.ny.gov/admin/messages/404oldsite.html>)
- Pennsylvania Fish and Boat Commission – PA Water Trail System (<http://www.fish.state.pa.us/mpagl.htm>)
- Pennsylvania Environmental Council – Water Trail Assistance Program
- Virginia Department of Conservation and Recreation (<http://www.dcr.virginia.gov/>)

### Communities and Elected Officials

Communities served by the proposed trail will have a stake in its success and will want to take action to benefit from the water trail and minimize any negative impacts. The local tourism office, chamber of commerce, businesses, and officials can become significant trail partners and supporters. Local officials often are the key people to work with to gain access to a site, funding, and technical support. Be sure to inform them of any controversies and public opposition. Invite them to participate in ribbon cuttings and other events.

### Nongovernmental Organizations

Water trail associations, environmental groups, land trusts, boater advocacy groups, scouts, and other groups involved in community affairs may become an important part of your user and volunteer bases. Some may even become partners or sponsors.

## **Communicating with Stakeholders**

Communicating with stakeholders is best done face-to-face, but use every tool at your disposal to get the job done. Go to their meetings, visit their homes, appear before the town council and the planning board, meet with them at the government agency office, visit them at their places of business, take part in their recreational activities, stay at the local bed and breakfast, or have lunch with them at the diner.

Let people show you features about the waterway. Ask citizens to hold a coffee klatch or backyard barbecue so their neighbors can meet you and ask questions. Afterwards make a list of their problems, needs, and opportunities.

### **Interviews**

Interview community leaders and other influential members of the community. Provide a clear, realistic plan of action, including anticipated ramifications and implications for the community. Then, interview them using a list of standard questions and documenting the answers.

### **Focus Groups**

Use focus groups to seek opinions about specific management, infrastructure, development issues and potential conflicts. Typically, six participants or local experts and a moderator participate in a 90-minute, audiotaped discussion. This session can be a private or in front of an audience. At the end of the discussion, allow the audience to ask questions. The objective is to get the best advice in a short amount of time. Such sessions help you, honor the participants, and increase the project's public credibility.

### **Surveys**

Mail a survey to all landowners that may be affected by the water trail. Surveys are most effective and credible when a professional conducts them, but that can be costly. With your survey include maps, vision and mission statements, a chronology of what has transpired to date, answers to the most common questions, and a cover letter that is as personal as possible. Invite recipients to contact you by telephone or other means. Do a follow-up call or postcard seven to ten days after mailing the surveys.

### **Public Forums**

Properly conducted—and well attended—public forums provide an excellent means of presenting plans to a community, receiving personal reactions, and gaining support for the project. Be sure to keep any promises that you make to the public!

## **Conducting a Public Meeting**

Public forums provide an excellent means of presenting plans for developing a water trail to a community. Here are a few tips on drawing a good size crowd and structuring the meeting so it does not get out of control.

## Drawing a Crowd

To draw a crowd, pull out all the stops:

- Encourage your partners to contact influential members of the community to support your meeting.
- Use the local press to announce your meeting. Most state press associations have a membership list on their website.
- Consider using a little controversy to bring fence sitters to the meeting. For instance, the Maine Island Trail Association attracted a record crowd to a forum with this message: “Come to an important public meeting that will affect your future access to Maine’s public islands!”
- Post announcements of meetings on local bulletin boards.
- Use a call-a-thon or phone trees to alert stakeholders.
- Send out postcards two months in advance and a meeting announcement three or four weeks in advance. To the folks who reply or inquire, send an agenda and other materials a week or two in advance.

## Structuring the Meeting

Plan ahead so the meeting runs smoothly:

- Choose a neutral, convenient, and large enough meeting room.
- Greet people as they arrive, thank them for their interest, and provide nametags.
- Use a tight agenda that gets straight to the point.
- Use a facilitator to conduct the meeting and keep it on track.
- Have the organization’s most succinct and dynamic speaker begin the meeting with a concise overview.
- Use other presenters whose information is critical. Allow questions and comments between presenters to avoid losing the audience.
- Use flip charts and other visuals to present topics you want the audience to discuss.
- Organize interactive sessions, including review of general maps of the area, to gather information from meeting participants on key topics such as existing and needed access sites, available facilities, points of interest, hazard areas, appropriate water levels, etc.
- Wrap up the meeting with a brief summary of conclusions, agreements, action items, and next steps. Do not over-promise.
- Reaffirm the importance of the public process and attendees’ participation.
- Follow-up the meeting in a timely way by sending out minutes, a list of action items, and an announcement of the next meeting to community leaders and news organizations.

## The Art of Facilitation

Your facilitator should make a point to:

- Call on as many attendees as possible (especially the quiet ones).
- Enliven the discussion.

- Consider setting ground rules for the meeting (such as one person speak at a time, and respect others opinions)
- Keep things on track.
- Be mindful of time.
- Allow for disagreement without contentiousness.
- Find areas of consensus.
- Gracefully manage the long-winded participants.
- Insist on being helped by a note-taker and a timekeeper

## Formalizing the Organization

As your work proceeds from planning into implementation and long-term management, you will need a more formal and durable organizational structure to manage the organization.

Implementing plans, raising and spending funds, generating and managing volunteers and staff members—all require day-to-day and long-term managerial skills.

First, decide what the real work of your group is going to be. Is your group really a coalition or alliance of partners? Could one partner serve as coordinator and another as the fiscal agent and fundraiser?

Will a state, regional, or local agency eventually become responsible for managing the trail? If so, will your group focus primarily on support, such as organizing volunteers, inviting public involvement, and raising money for special projects? That type of venture might be called a “friends group,” a nonprofit organization called a 509 (a) organization by the Internal Revenue Service that is closely associated with a public agency and can accept charitable donations. Friends groups often form later in the whole process, after a trail has already been established.

Here are two options to consider:

### 1. Partner with an Existing Organization

Using an existing nonprofit organization, such as a land trust or another trail group, to build and manage your water trail is not uncommon. An agreement could allow both organizations to share such resources as office space, equipment, and administrative services. You also could obtain many nonprofit advantages without the need to apply for your own 501c3.

Many successful nonprofit organizations begin as a project of another organization. Before agreeing to a joint venture, however, make sure the partner organization is one whose mission and interests are sufficiently supportive of water trails. Be sure there is a clear understanding of the roles of each entity. Talk with local and state agencies and conservation organizations--and seek legal advice.

### 2. Establish a New Nonprofit Organization

Creating a newly chartered nonprofit organization with a board of directors and an executive director and staff has several advantages, especially in raising funds. An uncomplicated, single-

named organization enhances public recognition when you approach landowners, public agencies, other organizations, and potential donors. Get legal assistance to make sure your organization has met all of the U.S. Internal Revenue Service and state requirements to qualify as a tax-exempt 501c3 entity.

### Roles and Responsibilities

Whether you decide to become a friends group, part of a coalition, or a project of an existing nonprofit organization, the board of directors or executive committee will be accountable for overseeing the organization's budget, planning, operating policies, personnel matters, projects, and financial stability.

Be careful to recruit board members who have the skills and enthusiasm to pursue the organization's mission. Look for water trail enthusiasts who are also accountants, public relations professionals, engineers, planners, attorneys, or community leaders.

The evolution of most boards of directors follows a three-step pattern:

## 1. Steering Committee

Sometimes the people who are most helpful initiating the water trail effort do not want to be involved in building and managing the trail. Public officials and business leaders, for example, might be willing to serve on the steering committee during the trail's formative stages, but they might not have the time to serve on the board of directors.

## 2. Working Board

Most young water trail organizations have few or no staff members. The board of directors has to tackle everything from answering the mail to writing newsletters, from keeping the books to choosing access sites along the trail. At this point, board members must have the time, energy, and interest to keep the project moving forward.

## 3. Governing Board and Staff

At some point in their development process, many trail organizations become staff-led operations. This does not mean that the board is absolved of responsibility. It means the role of the board changes. The board delegates program implementation and decision-making authority to an executive director and staff. The board now focuses its attention on planning, fundraising, and governance of staff activities.

The executive director hires, fires, and directs all staff members. Board members approve budgets and employment policies, adopt strategic and operating plans, and accompany staff members at meetings with potential donors.

### How Boards Work

One of the most convenient ways for boards to work is to form permanent committees responsible for management policies, finances, and personnel and to form temporary committees to oversee special projects and studies.

## Recognizing Value of Volunteers

Never underestimate the value of volunteers! A single volunteer can cause more change in a community than a government agency or an organization. A whole corps of dedicated volunteers can do wonders.

- Whether they volunteer out of passion or are specifically recruited for their expertise, they play key roles in the organization. Do not take them for granted.
- Give them productive, meaningful tasks that are integral to achieving the goals of the water trail project.
- Lead by example. Be willing to do anything and everything you ask volunteers to do. Participating in work projects and other activities can inspire loyalty to the organization and its mission.
- Support and acknowledge their efforts throughout a project.
- Periodically ask for their suggestions to improve the organization.
- Offer them opportunities for training.
- Recognize their contributions with a genuine “thank you” and an award.
- Continually recruit new volunteers to infuse energy and new ideas into the organization.

The Maine Island Trail Association, which depends on several hundred volunteers to care for more than 130 islands and sites in its 300 miles-plus trail system, has developed volunteer training and recognition to a science ([www.mita.org](http://www.mita.org)).

## Fundraising Tips

Building a water trail takes money. Before launching a campaign to get the money, make sure you have a sound business plan and fundraising plan. The business plan will give you an idea how much it will cost to build and maintain the trail year after year. The fundraising plan will delineate a variety of ways to approach potential donors. State economic development offices and university business schools can help you draft these plans.

- Figure your costs realistically. Building an access point or campsite with volunteers will still cost some money for materials, transportation expenses, and professional advice. Be realistic about your costs and even factor in a percentage for cost overruns.
- Establish short-term and long-term development goals. Some donors may respond to a practical, easy-to-accomplish project. Others may respond to the vision of establishing the overall water trail.
- Before asking for your first dollar, attain a 501(c)(3) not-for-profit status so you can be eligible to receive funds. For information, see the Internal Revenue Service’s Publication #557, “Tax Exempt Status for Your Organization,” ([www.IRS.gov](http://www.IRS.gov)).

### Pursue all Funding Sources

Start your fundraising campaign close to home and seek out a variety of sources, so your organization does not become dependent on one revenue stream.

Local municipalities, civic groups, businesses, and interested individuals are potential contributors of money and in-kind products, services, and labor. A construction company might be willing to provide equipment or gravel at cost, or free, and save you thousands of dollars in constructing a campsite.

Be creative. Have some fun. Stage a regatta or hold an auction. Such events can net hundreds or thousands of dollars—and cultivate grassroots support for your water trail.

*The Grassroots Fundraising Journal*, published by Chardon Press ([www.grassrootsfunding.org](http://www.grassrootsfunding.org)), and River Network ([www.rivernet.org](http://www.rivernet.org)) provide advice on initiating campaigns close to home.

Then, broaden your fundraising appeals. Talk with conservation partners and other groups about local, state, and federal funding opportunities. Investigate the possibility of obtaining grants from nonprofit organizations, private family foundations, and state agencies. Your state trails organization, for instance, probably dispenses federal funds through the Recreational Trails Program or other programs. Awards are often based on an 80/20 federal/local split.

## Government Grants

Several government programs provide funding and/or technical assistance for water trail development, maintenance, and related projects. The process, however, usually takes more research, partnership building, and paperwork than it does to apply for a foundation grant or corporate donation.

Many government grants include a “cooperative agreement” or contract that may require you to complete the project at a specific point in time. Some government grants will not be paid until “the deliverables” are received. Can you wait to be reimbursed?

Government grants can be great sources of funding if you have a specific project and you can make a compelling case that you can deliver on your promises.

**Federal Government Grants**—Generally, at the federal level, opportunities for grants are few.

The Chesapeake Bay Gateways Network ([www.baygateways.net](http://www.baygateways.net)), provides a variety of support for water trails, including funding for development of water trail maps and guides, orientation and interpretive signage, development of new and improved access to water trails, and preparation of management and stewardship plans.

Water trails are eligible for funding under the TEA-21 Recreational Trails Program, but they have not received meaningful support from this program or other federal funding sources. Other federal agencies that may provide grants include National Fish & Wildlife Service/The National Fish and Wildlife Foundation ([www.nfwf.org](http://www.nfwf.org)), National Oceanic & Atmospheric Administration ([www.noaa.gov](http://www.noaa.gov)), Bureau of Land Management ([www.blm.gov](http://www.blm.gov)), USDA Forest Service ([www.fs.fed.us](http://www.fs.fed.us)), and the U.S. Army Corps of Engineers ([www.usace.army.mil](http://www.usace.army.mil)). The National Parks Service Rivers, Trails & Conservation Assistance program ([www.nps.gov/rtca](http://www.nps.gov/rtca)) provides in-kind support and technical assistance.

**State Government Grants**—At the state level, focus your energies on Fish and Boat Commissions, RC&D Councils, and inter-jurisdictional agencies.

The following agencies also are involved in the development of water trails: the Maryland Department of Natural Resources, Pennsylvania Fish and Boat Commission and PA Department of Conservation and Natural Resources, New York Department of Environmental Conservation,

and the Virginia Department of Conservation and Recreation.

- PA Fish and Boat Commission (<http://www.fish.state.pa.us>) then click on Boating and then PA Water Trails
- PA DCNR ([http://www.dcnr.state.pa.us/greenways\\_trails.aspx](http://www.dcnr.state.pa.us/greenways_trails.aspx))

**Local Government Grants**—Many local and regional governments are also excellent sources of funding, and they often require less paperwork than federal and state agencies. For information about these grants, contact city and county executive offices and parks and recreation agencies.

Your U.S. congressman, state representative, and local elected officials can be of great help in obtaining government grants. They can set up meetings with the appropriate officials and help explain why your project will benefit the community. Keep them up to date on the progress of your project and be sure to invite them to speak at ribbon-cutting ceremonies.

## Corporate Sponsorships

Locally owned businesses, large corporations with a presence near your water trail, and companies with products and services related to water trails are all prospects to become sponsors for the trail or a specific trail project. Besides providing funds, corporate sponsorships can broaden your organization's visibility within the community, provide access to resources, and help you stay in touch with community leaders. Contact your local chamber of commerce and the state department of commerce for directories of local and regional commercial enterprises.

**Benefits to Business**—Many nonprofit organizations have a business membership or sponsorship program that works like a major donor program. Businesses contribute at certain levels and receive benefits such as personal communications and visits; recognition on your web page or brochure; and special invitations to water trail events. Other businesses may wish to make in-kind donations of equipment, labor, and materials. Some businesses may give the organization a percentage of sales. Keep an open mind and develop a mutually satisfying relationship.

**Developing Corporate Support**—Here are a few tips on how to develop a corporate sponsorship program:

- Prepare a strong, one-page statement about your organization's mission and objectives.
- Produce a brochure or picture book that eloquently illustrates your organization's vision for the water trail.
- Establish an industry leadership committee, if possible, to help raise funds.
- Make a list of prospective sponsors—and meet with them individually.

## Foundation Grants

Foundations can be key elements in a successful fundraising campaign for a water trail. These nongovernmental, nonprofit organizations primarily make grants to other nonprofit groups for educational, environmental, and a host of other civic purposes.

Some are small, and some have billion dollar endowments. Most foundations have specific issues—such as health, the environment, wildlife, education—and other qualifications governing their grants. Some foundation grants are restricted to certain geographical areas, so a foundation in your immediate area might be a good prospect. With any foundation, make sure your project fits with its mission.

For additional information about funding opportunities from foundations, visit River Network Partner Grants (<http://www.rivernet.org/howwecanhelp/howwag.cfm>), Environmental Support Center (<http://www.envsc.org/>), National Fish and Wildlife Foundation (<http://www.nfwf.org/>), Tom's of Maine small grants program (<http://www.tomsomaine.com/>), The Foundation Center ([www.fdncenter.org](http://www.fdncenter.org)), and the Support Center ([www.supportcenter.org/sf/](http://www.supportcenter.org/sf/)).

The Foundation Center operates libraries in Atlanta, Cleveland, New York, San Francisco, and Washington, D.C., and its *Finding Funders* directory offers links to private foundations, corporate-giving programs and other sources of nonprofit funding. The Support Center has an expansive, searchable database dedicated to funding resources.

## Other Nonprofit Sources

Some nonprofit organizations administer grants from federal, state, corporate, or private sources. For example, the River Network ([www.rivernet.org](http://www.rivernet.org)) administers the Watershed Assistance Grants (WAG) program funded by the Environmental Protection Agency, and The Conservation Fund ([www.conservationfund.org](http://www.conservationfund.org)) administers the Kodak American Greenways Awards, established by Kodak in partnership with The Conservation Fund and the National Geographic Society.

### Membership Campaigns

Membership programs bring recognition and strength to your water trails organization—and a diversified funding base. Membership programs can help you identify potential large donors, volunteers, future board members, and in-kind contributors. They provide you with a group of people who may have good ideas for your water trail and organization.

There are many ways to increase membership: special events, newsletters, magazine advertisements, face-to-face requests, word of mouth, email, web page, speaking engagements, telephone calls, and booths at festivals, boat shows, and access points.

Members can provide you with a base of volunteers, valuable contacts and networking opportunities, an informed base from which to draw board members, and a source of fresh ideas. Membership campaigns can provide a solid source of funds if managed well, and a solid source of headaches if not.

A successful membership system requires: a computer, versatile database, skilled operator, and communications tools such as a newsletter, website, or brochure, plus a marketing plan and lots of time. These requirements require skill and devotion and cost money to develop and maintain. Be cautious before choosing this option. The costs of maintaining your membership database may equal the income received from their membership fees. Consider establishing a major

donor category for membership, such as those who will give \$100 or more.

Donors generally give large gifts to an organization because they are able to do so, they have been asked to do so, and they feel a personal connection with the organization. Develop a personal relationship with major donors is a key to success!

### Direct Mail

Most young water trail organizations find that small membership appeals created in-house and sent to people who have participated in trail events can be more effective and less costly than a large direct mail campaign. Make an effort at every trail meeting and event to collect names and addresses, so you can make such a mailing. Otherwise, ask another like-minded organization in your area if you can use or rent its list. Make the letter as personal as possible, and include a stamped response card or envelope.

Using direct mail is the most effective and common way to dramatically increase membership for older, larger nonprofit organizations. Direct mail programs can be costly up front and require a long-term commitment to be profitable, so make sure this is how you want to use your funds, staff, and board before investing in such a campaign.

A direct mail campaign is probably not the way to fix a current financial problem, because results take time, often years. For every 1,000 pieces you mail, you may get only 10 to 30 members. Will you receive enough money to cover your printing and mailing expenses and fees to rent lists from other organizations or list brokers?

### Fundraising Events

Events can be an enjoyable way to raise funds and visibility for your water trail whether you are just starting or are well established. You also have a great venue: your water trail! A paddle trip is a popular way to celebrate water trails, gain media attention, engage the community, and yes, even raise funds. Some organizations hold annual auctions to raise funds. A sojourn, typically a multi-day paddling event, is an increasingly popular way to publicize water trails and the fun of spending time on a river.

For additional information about waterway sojourns and excursions, visit North American Water Trails ([www.watertrails.org](http://www.watertrails.org)), and Alliance for the Chesapeake Bay (<http://www.alliancechesbay.org/sojourns.cfm>). The Pennsylvania Organization for Watersheds and Rivers has a Sojourn Organizers guide on their website (<http://www.pawatersheds.org>).

### 3. Drafting A Water Trail Plan

Planning and developing a water trail requires maintaining a careful balance between protecting the resource and responding to the needs of landowners, trail users, and the community. You have established a steering committee or formal organization, talked with the stakeholders, established partnerships, recruited volunteers, and started raising funds. Now it is time to study the evidence and make some thoughtful choices about the character of the trail.

## Conduct Suitability and Feasibility Studies

Inventory and document the natural, historical, recreational, and scenic resources in the area of the proposed water trail. Gather and study reports about water quality, sensitive environmental factors, population patterns, socioeconomic characteristics, and public services and facilities. Along with all the pertinent statistical data and research findings, include maps and photographs of major resources.

## Analyze Needs of Stakeholders

Study the needs and objectives expressed by landowners, local officials, potential trail users, and other stakeholders. Involve the stakeholders in resolving their differences and other issues.

## Determine the Route

Using maps and the information you have gathered, decide where the trail will begin and end along the riverway, lakeshore, or bay coastline. Be logical and realistic.

## Locate Facilities

Determine the locations of existing and potential new access points, parking areas, and stopping-off areas along the route. Decide where any new campsites and other facilities should be located. Determine the locations of directional signs, identification signs, orientation exhibits, and interpretive exhibits.

## Develop a Work Plan

Develop a detailed development plan. Specify what needs to be done, how it will be done, who will do it, and when all these tasks will be accomplished.

## Assessing Resources and Social Factors

Use volunteers to gather and review information from your public meetings and forums and from studies and reports conducted by government agencies and universities.

Members of your own organization may have to conduct additional field studies. Be sure to include maps and photographs of major resources along with all of the pertinent statistical data.

Your inventories and assessments should include:

### **Resource Suitability Studies**

- Flora and fauna – important birding areas, high quality fishing areas
- Cultural and historical attributes
- Scenic qualities

- Water quality
- Existing access, parking, and marine facilities
- Potential camping areas
- Waterfalls, rapids, tidal flats, and other hazards
- Existing dams and portage routes
- Water gaging stations – safe water flows for boating
- Islands with potential for primitive campsites
- Isolated and private lands with little or no access

### **Social and Political Feasibility Analyses**

- Support within the community
- Proponents and opponents
- Existing and potential stakeholders and partners
- Manpower availability for trail implementation and maintenance
- Known and potential financial support

#### Assessing Recreational Carrying Capacity

Carrying capacity defines the maximum number of people who can use the water trail without negatively impacting the desired social or ecological conditions. Carrying capacity should be evaluated from four perspectives:

***Physical Carrying Capacity:*** the amount of recreational use that can physically occur in a defined space. Is enough water and shoreline space available to accommodate all planned uses?

***Facility Carrying Capacity:*** the amount of recreational use is constrained by the availability of facility support. Can water trail users' needs for facilities such as parking, boat launching, restrooms, camping, etc. be accommodated?

***Ecological Carrying Capacity:*** the amount of use that can occur without creating unacceptable impacts on the ecosystem. Will increased use inappropriately affect plants, animals, soil, water quality, etc.?

***Social Carrying Capacity:*** the maximum amount of use that can occur without impairing the desired social experience. Will increased use result in a “crowded” feeling that does not meet the water trail user’s expectations?

Somewhere between minimum and maximum use, optimal carrying capacity may trade higher capacity for other benefits.

#### Locating Facilities

The mere existence of a river, bay, ocean coast, or lake does not constitute a water trail. A water trail is a defined route that passes through a scenic area that includes various points of interest instead of a single element. The route must be appealing to attract trail users.

The waterway is obvious, but where to locate the trail’s beginning, end, stopping-off points, and facilities depends on several factors: nearby roads, existing and potential access points and

parking areas, current and potential camping areas, and other overnight accommodations. The types of boats that will be used will influence the design of your trail, particularly the kinds of access points and the distances between them—paddle craft requiring more frequent access points than power or sail boats.

Locating facilities requires compromises. Adding an access site and parking area will cause some damage to the natural environment. Not adding an access site can result in trail users creating numerous illegal sites in environmentally sensitive areas. Try to deal with this quandary by building attractive facilities away from sensitive areas. If developing in sensitive areas, consider “hardening” the site with a gravel surface to increase resistance to foot trampling. (The State of Virginia Division of Conservation and Recreation has developed guidelines for development of access and camping areas in riparian areas.)

Bring the user groups into the planning process. Paddler clubs, powerboat associations, outfitters, guides, marinas, and sports shops will help solve development questions and conflicting requirements.

Here are a few tips about locating trail facilities:

- **Access points, or launch sites**, should connect the trail with nearby roads or portage trails. Launch sites may be small and simple for car-top and hand-carried boats. They have to be relatively large, paved, or hardened, for boats transported on trailers. Access points should be close enough to insure safe, manageable traveling distances from one to another. They need to be frequently placed on trails restricted to non-motorized boats. Launching areas need to have adequate parking that is safe and patrolled by law enforcement authorities. Vehicles with trailers need two to three times as much parking space as those with car-top boat racks.
- **Day-use sites** are destination points along the trail where camping is not permitted. They may have landings, picnic areas, swimming areas, potable water supply or waste disposal facilities. A day-use area, however, may be as simple as a point of interest, with no facilities.
- **Overnight accommodations** include campsites, hostels, bed and breakfasts, inns, and motels. Take advantage of facilities that already exist. Then, turn to local paddlers, boaters, planners, and natural resource officials to determine suitable locations that could be developed to fill gaps. Campsites should have durable surfaces. Facilities to store boats and gear either should be available at the landing, campsite, or lodging facility. Provide information about town docks and marinas.
- **Orientation signs with a trail map** should be posted at all launch sites and camping areas. Ideally, include the map in a kiosk along with information about the trail, and messages about safety, boating regulations, “Leave No Trace practices” and resource protection. Other exhibits at these sites could interpret interesting natural and historical features.
- **A potable water system** that meets state health department regulations is costly to install. Most long-distance paddlers expect to carry a supply of water that will last several days. Inform boaters about the availability of drinking water in water trail map and guides, on orientation signage, and on the trail’s website, so they can plan and manage accordingly.
- **Disposal of human waste** is a major issue at launch sites, campsites, and day-use areas. Composting toilets or outhouses can be provided, but they are expensive. Local regulations may dictate the method used. In many wilderness areas human waste must be packed out. Visit ([www.mita.org](http://www.mita.org)) and search for pack-it-out information.

NOTE: Access sites and facilities should be carefully planned and managed to prevent damage to fragile resources—and to meet the requirements of the Americans with Disabilities Act (ADA). For more information about ADA requirements, contact your state parks or natural resource agency and visit ([www.adata.org](http://www.adata.org)) or ([www.adainfo.org](http://www.adainfo.org)).

### Making a Work Plan

You have conducted resource studies and analyzed reports. You know who your stakeholders are. You have determined the route of the water trail and decided where access points and facilities should be located. Now it is time to develop a work plan that identifies what needs to be done to turn the concept of a trail into a reality.

Figure out and write down what needs to be done step by step. Select some minor, low-cost chores that trail leaders, stakeholders, partners, and volunteers can tackle first. That will help motivate the work crews and generate enthusiasm and create some milestones that can be celebrated along the way by the community. Then go on to the major tasks.

- The work plan should break down what needs to be accomplished, by whom, how, and when.
- “What” is the short description of the task or tasks.
- “Who” are the individuals or groups assigned to the task or tasks.
- “How” defines how the tasks will be accomplished.
- “When” refers to the timing of the action. The work plan can include projected dates or can be a simple list of tasks organized in sequence. The latter can be divided into “near-term” and “long-term” tasks, and specific dates can be added as work progresses.

Preparing a work plan can be tedious, but clearly documenting defined tasks will save time in the long run and let everyone in the organization know what has happened and what needs to be done next.

## **B. Building a Water Trail**

You have created a nonprofit organization, identified the stakeholders and partners, and drafted a development plan for the trail. Now it is time to go to work—to create access sites, develop facilities, and prepare guide materials for trail users.

### 1. Establishing Access

Over the years local boaters commonly create informal sites to get onto and off the waterway. Some of them make ideal accesses for the trail while others might be dangerous, awkwardly placed, and unevenly spaced for general public use. You probably will have to develop some new launch sites and parking areas, and you may have to create some campsites.

## **Be Prepared**

Thoroughly prepare everyone in your organization who is going to approach a private landowner or public agency about obtaining permission to use a site or purchasing property for the trail. They should be able to clearly articulate the vision of the water trail, usage projections, facility plans, maintenance services, liability issues, and why the inclusion of the site or sites is critical to the overall effectiveness of the trail.

## Acquire Access Permission

Obtain legal advice when making access agreements with private individuals, public agencies, businesses, or organizations. Agreements typically include handshake agreements that are renewed annually, leases that last a few or several years, and permanent deeded easements.

## Purchase Sites

Obtain legal assistance when making outright purchases of property, purchases of easements, or donations of land. Most water trail organizations prefer to obtain access permission and spend their limited funds on facilities and maintenance. Occasionally, however, they have to raise funds to buy property for critical launch sites or camping areas.

## Follow Through

Establish a regular schedule to visit and talk with landowners and public lands managers. Look for creative ways to acknowledge their contributions at an annual event with stewardship volunteers. Pass on letters of thanks from visitors. Chat with them periodically on the telephone. Listen to their concerns and resolve problems as soon as possible.

## Acquiring Access

During the planning process, your organization probably received numerous suggestions for potential access sites from individuals, organizations, government agencies, and businesses.

When you laid out the route on paper, you considered these suggestions and made initial selections based on the locations of roads, accessibility of the terrain, spacing along the water route, and other factors. Now you have to face the difficult—but often rewarding—chore of obtaining permission to use lands or to purchase property for launch sites, camping areas, and other facilities.

Initial access to the trail typically will be at existing parks, federal and state boating access sites, private marinas, current campgrounds, and riparian lands owned by nonprofit organizations. As the trail is expanded over the years, additional important access sites can be acquired and developed.

## Private Property Owners

Private land owners will be particularly interested in what stewardship and management services you are offering to ensure protection of their property. They will want to know about anticipated usage and plans for facilities and services before agreeing to sign a year-to-year agreement, lease, or permanent easement.

Make private sector partners part of the planning process and invite those with attractive sites on the waterway to have them officially designated as points on the route. Private marinas and campgrounds might view the designation as an opportunity to serve the public and expand their business. Some private owners may charge users for using the access site – be sure to communicate this information to users through the water trail map and guide and website.

## Public Land Managers

Just because land is publicly owned does not necessarily mean it would automatically be accessible to water trail users. It is still critical to request from the public land manager. Some public lands are managed as reservoirs, wastewater treatment plants, and other purposes incompatible with public use.

Other public lands, such as natural and recreational areas, are usually excellent launch sites and stopping-off spots. Some of these areas may already have camping and other overnight accommodations and well-established launch pads for small boats, canoes, and kayaks. Public land managers will have many of the same questions as private property owners. Do your homework so you can speak authoritatively and approach the managers of these lands about becoming trail partners and having their lands designated as sites on the trail.

## Preparation

Before approaching a landowner or land manager for permission to use their property as an access site, you should have the following in place:

- Trained volunteers or staff to assist in caring for the property
- Tools and equipment, including workboats if the property is accessible only by water
- Liability information
- Management plan, be it formal document or unwritten intentions
- A commitment to an ongoing relationship and regular communication with the owner or manager
- A single, reliable contact within the water trail organization

## Making the Request

Asking for access to a property is much like fundraising: It requires preparation and a gracious, thoughtful approach by an enthusiastic, knowledgeable, and trust-inspiring representative of the organization.

Begin with a polite letter of introduction and intent and follow that a week or two later with a telephone call. Try to arrange a face-to-face meeting at a time and place convenient to the property owner or manager.

At the meeting articulate the following:

- Benefits of access that will appeal to them, such as fostering an appreciation of nature, building a constituency for the resource, or making the world a better place.
- Your organization's philosophy and policies about usage, such as Leave No Trace practices.
- Kinds of anticipated users of their property, such as paddlers, families, school groups interested in day use only, and campers.
- Amount of anticipated usage.
- Services you are willing to provide, such as periodic cleanups, habitat restoration, stewardship services, or fee collection.

If the owner or manager agrees to grant access to trail users, be sure to express your gratitude and follow that up with a letter acknowledging the agreement.

## Overcoming Objections

The most common objections to water trail proposals are voiced by private landowners and usually involve the following:

- Vandalism or burglary to neighboring properties or buildings
- Newcomers squeezing out traditional users
- Water trail's popularity affecting the fabric of waterside communities
- Commercialism catering to boaters
- Conflicts between boaters and local users, such as fishermen and hunters
- Crowded launching ramps, parking lots, and other access sites

Accept the fact that you will be dealing with private landowners and community leaders and that you may revisit their concerns several times in the course of the project. Deal with the issues head-on. Seek out opponents and hear their concerns and objections. Engage them and others in the community in solving the problems.

## Liability

One issue that almost all private landowners will have before they agree to open their property to the public is the question of liability. In many instances there are limits to their liability.

Nearly all states have a recreational use law designed to limit liability for landowners who open their property for free public recreational use. A summary of the recreational use statutes in all 50 states can be found at

[http://www.nps.gov/ncrc/programs/rtca/helpfultools/ht\\_publications.html](http://www.nps.gov/ncrc/programs/rtca/helpfultools/ht_publications.html) and click on the publication - Recreational Use Statutes and the Private Landowner.

Some states confine this landowner protection to specific activities such as boating, while others provide blanket protection for all recreational activities. Some states even allow for restitution of the landowner's legal fees if a member of the public unsuccessfully sues.

Providing insurance is an option. For example, the Hudson River Watertrail Association in New York owns its own campsite. A one million dollar insurance policy for the property runs about \$250 per year. The cost of adding another piece of property to the policy was estimated in 2001 to cost \$50 per year.

## Assessing the Property

After an owner or manager indicates an interest in granting access, make a thorough assessment of the property if you have not done so already. Your assessment may include:

- An inventory of sensitive wildlife habitat or fragile vegetation
- Identification of potential campsites and day-use areas that would minimize impacts on the property
- An evaluation of the access point's ease of use from the water and safety concerns
- An investigation of any hazards, such as uncapped wells and hunter's traps
- A survey of neighboring communities for indications of potential opposition
- A research study of the traditional uses of the property

Use the results of these studies to develop a policy on how the site will be managed.

## Sealing the Deal

If the property is suitable, talk with the owner or manager in detail about his or her expectations of use and impacts and your organization's ability to manage usage.

Encourage the adoption of strict low-impact standards—such as no fires, carrying out all human waste—for all sites along the trail, but let the owner or public land manager establish the rules and restrictions for the specific site.

Reach an understanding in writing. The document can be as simple as a gracious letter reiterating agreements and responsibilities. Some owners and managers prefer such an informal approach while others may request a legal document. Other owners, such as land trusts, may prefer a stewardship and management plan based on the inherent qualities and characteristics of the property. Include a time period in all agreements with an option to renew. It is probably wise to have your lawyer examine and approve your agreements before signing them.

NOTE: Visit the Maine Island Trail Association at ([www.mita.org](http://www.mita.org)) for examples of a management plan, letter to a landowner, and annual report letter.]

Visit the Hudson River Watertrail at ([www.hrwa.org](http://www.hrwa.org)) for information about its insured campsite.

### 2. Developing Trail Facilities

Facilities that are customarily built along a water trail fall into three general categories: access, day use, and camping. The size and appearance of these facilities may well be determined by the

availability of funds, the setting, and the expertise of the construction crew. Here are tips to consider when building these facilities:

## Access Facilities

Build facilities for visitors to enter and leave the waterway trail that are appropriate for the setting, be it wilderness, rural countryside, or urban. For instance, it would be just as inappropriate to provide elaborate facilities in a wilderness area as it would to provide rustic facilities at a heavily visited urban waterfront. Make sure the access facilities are appropriate for the types of boats typically used on the waterway. Consider what kind of boat ramp, if any, is needed and how large the parking area should be. Make the facilities large enough for the anticipated usage but do not overbuild.

## Portage Trails

Build portage trails where visitors have to transport boats around obstructions or hazards in the waterway and from one body of water to another. In some instances, you may have to build a portage trail from the parking area to the waterway. Compared to hiking trails, portage trails generally must be wider and smoother and have more gentle curves and turns. They should be able to accommodate collapsible boat dollies, which are becoming popular. Try to have a slightly wider area at each end of the portages for loading and unloading.

## Day-Use Areas

Provide toilet facilities that are appropriate for the wilderness, rural, or urban setting. Other day-use facilities range from simple designated picnic areas to hiking trails with sophisticated interpretive exhibits. Providing interpretive and orientation information can enhance their experience—and direct their activities away from areas that are environmentally sensitive, unsafe, or closed by landowners.

## Camping Areas

Build your campsites so they are easily accessible from the waterway, have a safe place to store boats, are fairly level and well drained, and offer protection from strong winds. Provide wooden tent platforms in heavily used and fragile areas. Install an appropriate human waste disposal system. If fires are permitted, provide grills to reduce the possibility of fires getting out of control.

## Construction Crews

Use care in deciding whether to use volunteers or professionals to construct trail facilities. Volunteers can readily handle the relatively simple tasks, such as clearing brush for campsites and building picnic tables. Some volunteers may be current or retired construction workers and managers who can handle complex construction projects. For large, difficult projects, you may have to use—and pay for—the services of an architect and several contractors, plus a general

contractor or engineer to coordinate their efforts and to obtain all the necessary permits and inspections.

### Constructing Facilities

Before pouring any cement, driving in nails, or applying paint, think about what you are trying to accomplish and make some basic decisions.

## Questions to Consider

- What type of experience are you providing? Wilderness? Urban? Something in between?
- How many visitors do you expect at one time or over the course of a year? Is the trail or facility close to or far from a large population center?
- Will you use volunteers or paid crews to construct the facilities? Will a paid staff member serve as the supervisor of volunteers or as the contact with contractors?
- Is the facility legal? Can you secure the necessary building, plumbing, and electrical permits from the appropriate agencies?

## Key Points

- Be consistent in your use of materials so visitors will readily identify the trail's facilities.
- Minimize environmental impacts and intrusions on neighborhoods and views.
- Use soft colors, make sign messages positive, and keep the facilities clean.
- Start the permit approval process well in advance of planned construction dates.

## Access Facilities

Areas established to provide access to the waterway usually consist of a parking area for vehicles with or without trailers; a trail or ramp to the water for launching and recovering boats; signs; and toilet facilities. Because it takes time to load and unload boats, access sites should be large enough to accommodate several boating parties at one time. Boats transported on trailers, however, usually arrive at the parking area with most of the gear aboard, so a single launching ramp may be enough to handle the traffic.

The States Organization for Boating Access has developed an excellent manual, *Design Handbook for Recreational Boating and Fishing Facilities* (<http://www.soba.gen.dc.us/>). In addition, the publication "Logical Lasting Launches" is available from the National Park Service Rivers and Trails Program at [http://www.nps.gov/ncrc/programs/rtca/helpfultools/ht\\_publications.html](http://www.nps.gov/ncrc/programs/rtca/helpfultools/ht_publications.html).

**Parking areas** should be built on well-drained soils in areas that do not flood. The number and type of parking spaces you provide should give the visitor important clues about what to expect on the trail. If a visitor arrives and takes the last parking spot in a 10-car lot, for instance, he or

she will probably perceive that the traffic on the trail is at capacity. If that person arrives to find 10 cars in a 20-car lot, he or she may think the water trail is not crowded. If the trail has been designed to accommodate the carrying capacity, resist pressure to expand the parking.

**Launch sites** should slope naturally to the water at grades of 10 to 15% for boats on trailers and 5 to 15% for hand-carried watercraft. They should be protected from strong prevailing winds and currents; lack obstructions, and be deep enough to be reasonably navigable.

**Portage trails** may have to be built to avoid obstructions or to access one body of water from another. A portage trail itself can impart a sense of adventure to the whole water trail experience.

## Day-Use Facilities

Depending on available resources, you may want to create areas along the trail where visitors can relax and perhaps learn something about the area. Keep in mind that every amenity—picnic table, fireplace, roofed canopy, toilet—will add to the maintenance tasks of our volunteers or paid personnel. Do not provide trash barrels unless you can empty them on a regular basis.

Instead, encourage carry-in, carry-out procedures through a Leave No Trace program.

Anticipate that flooding will affect your facilities from time to time and will require need for emergency repairs and maintenance.

**Picnic areas** provide boaters with opportunities to go ashore to stretch their legs, relax, and enjoy a meal. They are especially important on long water trails. Providing tables and toilets may diminish the wild character of a waterway in some areas, but they may be necessities along other water trails. Do not install tables below the normal high-water mark.

**Wayside exhibits** can heighten interest in the trail's natural and cultural features and enhance the overall trail experience. Make them as site-specific as possible at locations, such as campsites and picnic areas, where boaters can land safely. Construct the exhibits using durable materials such as with aluminum bases to be to withstand flooding.

## Camping Areas

For many visitors, spending a night or several nights under the stars or in a tent is an essential part of the trail experience. Some areas along the waterway make natural campsites and have been used by travelers for hundreds or thousands of years. Make them a part of your trail, but ask your state preservation office or other agency to check them for historic and prehistoric artifacts.

**Landing areas** should be easily accessible at all water levels and in areas where boats can be stored safely away from prevailing winds, currents, and tides.

**Campsites** should be located in gently sloping, well-drained areas. If anticipated use levels are high or vegetation and soils are fragile, install wooden tent platforms or build pads with sand, soil, or gravel bounded by rocks or logs.

**Campfires** are not appropriate at all campsites. Lack of appropriate fuel, landowner restrictions, and high risk of uncontrolled fires may warrant a stoves-only policy. If fires are allowed, build small fire rings. Remind visitors of the Leave No Trace practice of using firewood small enough to be broken by hand. Make your decision about campfires and educate water trail users.

**Disposal of human waste** is as challenging an issue as fire. Methods range from carry-out practices, favored by managers on western rivers and Maine's coast, to elaborate vault or

composting units and portable waterless privies. Build traditional pit privies—either open or enclosed in a small wood building—where they are legally permitted. Composting toilets can be an esthetically better option but are often expensive to install and manage.

Leave No Trace (<http://www.lnt.org/>) and The River Management Society (<http://www.river-management.org/>) provide useful materials about human waste disposal methods.

## Construction Tips

Before starting the actual work, decide whether you want to use volunteers or pay for professional help.

**Use volunteers** to build basic facilities. Using volunteers is a great way to build an esprit de corps in a fledgling organization, but keep in mind that some volunteers may be highly skilled and others may know little or nothing about constructing facilities. Match the tasks with their skill levels and put a skilled volunteer or paid staffer in charge.

Be sure to have detailed building plans, a work schedule, and required permits before starting the project.

**Use contractors** to build highly engineered structures and projects involving serious environmental issues requiring studies and permits. If the construction project is especially large and complex, hire a general contractor or engineer to manage it on a day-to-day basis.

Before signing a contract, meet with several firms, inform them of your mission and vision, visit the site or sites, and review your building plans. Some contractors may become advocates of your project and lower their fees.

Get at least three bids. Check the contractors' references and examine other work they have done on similar projects. While the lowest price is important, the confidence you have in the quality of the contractor's work and availability to meet your schedule may well be more important than the fee.

For more information, visit the Appalachian Mountain Club ([www.amcinfo.org](http://www.amcinfo.org/)); The Volunteers for Outdoor Colorado ([https://secure.confluent.net/vac/Order\\_manuals.cfm](https://secure.confluent.net/vac/Order_manuals.cfm)); Western Trailbuilders Association (<http://www.trailbuilders.org/>).

**Dams, particularly hydroelectric dams**, present special challenges to water trail managers. They modify, often dramatically, the natural character and environment of a river or lake and present significant barriers to navigation that require the building of portage trails. Sudden releases of large water flows from dams can endanger downstream waders and boaters. It is critical to communicate information about dams and required portages to your water trail user in a map and guide, orientation signs, and website.

Owners of hydroelectric dams may help you build portage trails around the dams. The Federal Energy Regulatory Commission (FERC) requires them to compensate the public for the commercial use of the waterway by providing public access and, in many cases, recreational facilities. If your project is above or below a hydroelectric dam, examine the terms of the FERC

license regarding recreation facilities. Find out when reviews are conducted and when the license is up for renewal—the best times to seek help in obtaining facilities to enhance your water trail.

For more information, visit:

- National Hydropower Reform Coalition (<http://www.hydroreform.org>)
- American Whitewater (<http://www.americanwhitewater.org/>)
- Hydropower Recreation Assistance Program of the National Park Service's Rivers, Trails, and Conservation Assistance Program (<http://ncrc.nps.gov/hydrro>)
- FERC (<http://rimsweb1.ferc.gov/rims.q?rp2~intro>)

### **3. Producing Guide Materials**

All but the most adventurous of boaters want a map of the water trail and information about sites—and hazards—they will encounter along the way. They want to know the locations of launching and parking areas, campsites, picnic areas, toilets, and other facilities. You can convey this information, safety tips, and management policies through map folders, guidebooks, signs, and orientation exhibits and websites. Properly written and designed, they can greatly enhance the water trail experience.

#### **Map Folders or Brochure**

Produce a simple foldout map and guide to help first-time users of the trail find their way. Such a folder may be the only publication that is needed to guide users on short day-use trails and overnight trails of 50 miles or less. Revise and update these handy tools when you print a new supply. Depending on your financial resources, distribute them as free publications or sales items.

### **Map and Guides**

Create a water trail map and guide about the trail after testing the waters with the simple foldout map. You may find that a larger publication is both needed and desired by users to convey practical visit information in greater depth and to provide boaters with detailed inset maps of certain areas (such as directions to access points, water hazard areas, and dam portages). To widen the appeal of the map and guide, it could contain interpretive essays and features about the area's natural, historical, and recreational features.

Depending on the number of pages, use of color, and other factors, map and guides can be costly to develop and print. Selling map and guides can be an important source of revenue for your water trail. This revenue can be used to fund a reprint of the map and guide and development of water trail facilities.

### **Websites**

Develop a website so potential users can download and print out the water trail map and basic information to plan their trip. . Increasingly, websites are the first places people search to get travel and recreation information. Keep the website up to date and, as time permits, add links to local outfitters, area accommodations, points of interest, and related sites.

## Signs

Produce orientation, interpretive and wayfinding signs to increase the public's awareness of the trail, to direct visitors, to identify sites, and to indicate hazards. Hire a professional design firm to create a signage plan for the whole trail, so the signs will have a consistent appearance from one end to the other. The sign plan will also provide formats and instructions for adding and replacing signs in the future.

## Wayside Exhibits

Install wayside exhibits at launch sites to provide orientation information, a map of the trail, safety tips, and regulations. As funds permit, produce wayside exhibits that interpret natural and human history stories related to stopping-off sites along the trail. Hire professionals to design and fabricate the exhibits and bases, so they convey a consistent, standard approach that will enhance the trail's identity.

### Developing Wayfinding Guides

Unlike a clear path through the woods, a water trail is a nebulous entity. But, oddly enough, identifying the watery route in a map folder and guidebook, on signs and exhibits, and on the World Wide Web bring a sense of reality to the trail. These wayfinding guides are tangible evidence of the trail, and, to those who have been working on the creation of the trail since the beginning, badges of honor.

## Selecting the Format

A foldout map and guide may be perfect for short day-use trails and overnight trails of 50 miles or less. For longer trails, the creation of a map folder and a guidebook containing detailed maps of the various trail sections may be appropriate.

If possible, distribute the map folders free of charge. Because of development and production costs, guidebooks usually are sales items. Either way, the trail organization has to establish distribution systems for the publications through vendors such as local marinas, bookstores, nonprofit organizations, outfitters and other water trail related businesses, a website, and the mail.

DO NOT provide too much information. While the safety of trail users is paramount, revealing every nuance of the waterway and shoreline detracts from the sense of discovery and adventure.

Use professional writers, mapmakers, and graphic designers to create quality publications that reflect the trail's character and the organization's vision and objectives.

## Essential Information

Map folders and guidebooks should include an introductory overview of the trail and information about the trail's extent, points of interest along the way, access points, boating and other regulations, Leave No Trace principles, safety concerns, and, most important, a map or a series of maps. Besides covering these subjects and maps in greater detail than folders, guidebooks can also include interpretive essays about the area's plants and animals, human history and

prehistory, and recreational activities.

**Safety checklists** should include information about essential gear; emergency phone numbers; safe water levels, tidal conditions, and weather or where to obtain this information on the telephone or the web. Highlight any water-based or land-based hazards, such as dams, rapids, jellyfish, poison ivy, poisonous snakes, and bears. If applicable, note the water and skill levels that may be necessary for certain segments of the water trail and emphasize the importance of recognizing one's capabilities and experience.

**State and local regulations** should be provided for such activities as fishing, boating, swimming, campfires, and hunting.

**Stewardship guidelines** are especially important. Be positive—using more do's than don'ts—in these messages to inspire a stewardship ethic instead of alienating visitors. Use the Leave No Trace principles to frame the advice. Provide detailed instructions on the recommended or required methods for human waste disposal. For more information about Leave No Trace principles, visit ([www.LNT.org](http://www.LNT.org)).

**Locations of facilities and amenities** such as access points, campsites, picnic areas, potable water, and toilets should be listed and shown on the map or maps. Include information about permits, fees, and overnight parking restrictions. Describe features of nearby parks, historic sites, museums, and other public facilities.

On a website, provide a Resource list -with locations and telephone numbers of canoe and kayak outfitters and liveries, bait-and-tackle shops, restaurants, bed and breakfasts, campgrounds, motels, grocery stores, and other businesses. This information tends to change from year to year, so it should not be included in the texts of map folders and guidebooks.

## Other Considerations

Should a guidebook include advertising? Should you use waterproof paper? Should you consider developing a website and a CD guidebook?

**Advertisements** can clutter a publication and commercialize the trail experience, but sales of advertising space can help pay the printing bill. Some of the larger water trail organizations include with their guidebooks a separate pamphlet devoted to advertising and information about trail supporters.

**Waterproof paper** increases the durability of maps and guides, but it adds to the printing costs. Weigh the increased costs against potential sales.

**A CD ROM guide** can be produced at a lower cost than printing a guidebook and can be distributed to users via the mail and at local marinas, outfitters, and stores.

**A website** is an excellent way to convey information about the trail as long as staff members, volunteers, or contractors are available to set up pages and keep them up to date. The benefits of a website over printed materials include the relative ease of modifying information, sending out appeals for volunteers, announcing special events, and providing a forum for trail users. If you have produced a sales guidebook, consider the financial tradeoffs of providing access to downloadable information through a website.

## Mapping

Use a professional cartographer to produce your trail map or maps. Because most water trails are linear and many of them are long, determining the size and scale of water trail maps can be complex. Folders can contain an overall trail map and insets of a few segments. Guidebooks

typically contain a small overall trail map and detailed maps of segments on individual pages or two-page spreads. Foldout maps can greatly add to the expense of guidebooks.

In preparation for the cartographer, carefully plot important trail information such as access points, campsites, picnic areas, hazards, and points of interest on maps of your waterway produced using geographic information systems (GIS) or by the U.S. Geological Survey or other government agencies. Obtain additional resource maps from consulting firms, colleges, and local agencies.

A simple, inexpensive black-and-white map could be used for the first year or two while the trail facilities are being built. Full-color maps, however, are much more effective at depicting the great variety and complexity of information associated with water trails.

### Trail Signs and Exhibits

Signs, orientation exhibits, and interpretive wayside exhibits are critical communication tools. They guide visitors to the trail and sites along the trail, identify sites and facilities, provide warnings about hazards, convey management policies, and provide educational information.

Signs and exhibits can also detract from a wilderness experience. Usually, a few judiciously placed and properly scaled signs are more effective than many signs.

## Planning and Design

Hire a planner and designer to create a signage plan for the whole trail. Determining the content, sizes, colors, styles, materials, and locations should not be left to chance or the whim of a member of the board or staff.

**Create a hierarchical signage plan** that honors the sequence in which visitors will view the signs and their needs at that moment. For instance, a visitor might first see a relatively large directional sign on a major highway, a smaller access identity sign, a parking sign, a trail orientation exhibit, and a boat launch sign. On the waterway, the visitor might see a small hazard sign, a bridge or campsite identity sign, a picnic area sign, and an interpretive wayside exhibit.

A comprehensive sign plan will bring order to the content, scale, appearance, and placement of these various kinds of messages. The content must be large enough to be legible from a car or a canoe or on foot.

**Decide what is important** to sign and what is not important to sign, so the landscape does not become littered with signs. Is a sign necessary if the information is covered in a map folder or guidebook?

**Make your messages concise and clear** not only on signs but on orientation exhibits and interpretive wayside exhibits. Remember the 3-30-3 rule: some people will spend only 3 seconds looking at an outdoor orientation or interpretation exhibit; some will spend 30 seconds; and some—the readers—will spend 3 minutes.

**Use colors that blend** in with the natural environment, and use them consistently to help

establish the trail's identity. For instance, the Hudson River Water Trail uses a green and blue color scheme that is similar to the logo of the sponsor, the Hudson River Valley Greenway. Many outdoor groups use a variety of brown and yellow tones.

**Obtain permits and permissions** before creating and installing signs on public and private lands that your organization does not administer. State or local highway departments usually have to approve the installation of signs along roadways, and, after approval, carry out the actual installations.

**Orientation exhibits** can be standardized for all the access points along the trail. They typically are freestanding vertical panels that contain a brief introduction to the trail, key safety tips and regulations, a map with a You Are Here label, a list of facilities along the trail, and a few photographs and descriptions of scenic and historical sites. Include brief statements about overnight parking restrictions, Leave No Trace principles, and human waste disposal policies.

Possible safety issues include fast currents and hydraulics; the ranking of rapids according to the International Scale of River Difficulty; seasonal, tidal, and hydropower variations in water levels; mandatory portages, and other hazards.

If the trail is long, modify each orientation exhibit to highlight different points of interest and hazards in a specific area.

Some organizations install orientation exhibits under a small kiosk roof. Such structures provide shade and shelter from rain, but they add to the cost and can become homes for bees and birds.

Consider installing a bulletin board next to or on the back of the orientation exhibit if there is a need to post several temporary notices.

**Interpretive wayside exhibits** should be as site-specific as possible. They are an excellent means of telling stories about the human history in the area and variations in the plants and animals along the waterway. Keep the texts brief and to the point and include pertinent photographs and illustrations to heighten interest and to distinguish them from signs.

**Campsite and day-use area identity signs** can be helpful to trail users, but some trail organizations rely instead on identifying them in map folders and guidebooks.

**Signs to mark the route** generally are not necessary on water trails, but they can be used to assist with orientation and navigation (such as to direct boaters to the best channel or route around an island or a sign on a bridge) and to warn them about waterfalls, dams, shipping channels, or blockages. Do not place signs in sensitive habitat areas such as wetlands and areas with rare plants and soils unless signs are absolutely necessary to curtail trespassing. Signs could attract undue attention to those areas.

## Materials

Use materials for the sign panels and bases that are durable and resistant to flooding and harsh weather conditions and vandalism. Your budget may determine what materials you use and their

sustainability. Explore the possibilities of using recycled materials. If you are planning to change the information on a sign or exhibit in two years, consider fabricating signs using a digital print process. Materials and printing technologies are constantly changing, so check methods and prices with several fabricators.

**Wooden signs and posts** may be esthetically pleasing on water trails, but they may require more frequent replacement and maintenance than other types of signs. If you use wood in wet areas, be sure the signs are made of marine plywood and cedar. Do not use pressure-treated wood preserved with chromated copper arsenate (CCA) to avoid having the chemicals leach into the environment. Wooden signs can be painted and silk-screened. They also can be routed or sandblasted. They may require new coats of polyurethane or comparable sealant on an annual or bi-annual basis.

**Aluminum and steel sign panels** coated with baked enamel are commonly used for permanent identification signs along highways, at trail access points, and to identify facilities. Both types are durable, but steel is subject to rusting in marine environments.

**Orientation and interpretive wayside panels** are commonly screen-printed or digitally printed on paper and embedded in fiberglass to provide a high level of detail in the photographs, illustrations, and maps. For even greater clarity and sharpness, use the more expensive porcelain enamel fabrication process.

**For bulletin boards**, use a computer to print temporary notices on standard copy paper (8" x 11", 8" x 14", or 11" x 17") and laminate the paper. Use bulletin boards to post information about lodging accommodations, outfitters, shuttles, and stores.

**Rock cairns** may be more appropriate than signs to mark landing sites at beaches and deserts.

## Sign Maintenance

Determine before installing the signs and exhibits who is responsible for maintenance and replacements: the property owner, trail organization, local or state agency. Use the master list in your sign plan and inspect all signs and exhibits on a regular schedule. Remove graffiti and make repairs as soon as possible. Paint can be cleaned off metal and fiberglass relatively easily, but wooden signs may have to be repainted or replaced.

For more information about developing map folders, guidebooks, and wayside exhibits, visit the National Park Service at ([www.nps.gov/hfc/products.htm](http://www.nps.gov/hfc/products.htm))

## C. Managing a Water Trail

After the water trail has been established, the organization will be faced with a constant challenge: balancing the needs and values of recreation and conservation. Managing and maintaining a water trail may require the skills of some individuals who helped establish the trail. But the trail organization now has to make an ongoing effort to attract staff members and volunteers who can devote their energies to day-to-day and seasonal tasks.

### 1. Protecting the Resource

The water trail's success now hinges on keeping the waterway as pristine as possible or improving its condition through a variety of conservation programs ranging from cleanup campaigns to habitat restoration projects.

## Strengthen the Organization

Recruit staff members and volunteers who can run the organization's office, conduct

conservation programs, supervise habitat restoration projects, present interpretive programs, assign volunteers, purchase equipment, enlist new partners, and conduct fundraising campaigns.

## Maintain Facilities

Clean and repair parking areas, launch ramps, campsites, fire rings, toilets, portage trails, signs, exhibits, and other facilities. Establish a regular maintenance schedule and keep records of repairs and replacements.

## Conduct Cleanup Campaigns

Organize public campaigns to clean up trash along the waterway at least twice a year, before and after the busy season.

## Monitor Water Quality

Enlist volunteers to establish and conduct an ongoing water-quality monitoring program. Alert officials about illegal dumping, floodplain encroachments, and damage to natural, archeological, and historical resources.

## Track Usage

Document the use of access points, campsites, picnic areas, and other facilities, including private shuttles, to help formulate conservation programs and restoration projects.

## Restore Habitats

Use volunteers to remove invasive nonnative plants and restore native vegetation along the waterway. Conduct or participate in fisheries surveys and other wildlife studies.

### 2. Educating the Public

Building and expanding community support for the water trail is a never-ending process and should be considered an essential element of the management plan. Provide a variety of interpretive educational programs to inform both children and adults about the waterway and the Chesapeake Bay. An informed citizenry will value and champion the trail and become active in stewardship activities.

## Conduct Interpretive Programs

Use staff members, volunteers, and outfitters to interpret the area's natural and cultural heritage on trips along the water trail and on adjacent lands.

## Hold Special Events

Sponsor water festivals, paddling trips, sojourns, canoe races, and other water-related events to broaden community support for the trail.

## Promote Conservation Practices

Include conservation messages in your publications and signs and inform the public about the trail's connection with programs to restore the ecology of the Chesapeake Bay.

### Conservation and Education

At all times, the water trail organization must be vigilant about protecting—and, better yet, enhancing—the natural qualities of the waterway itself. By initiating a series of conservation projects and education programs, the organization not only protects the waterway but gains a cadre of water trail supporters.

#### Tracking Visitor Use

Trail managers should track visitor use to evaluate environmental or social impacts. Keep track of visitor use through:

- Logbooks at access points, day-use areas, and campsites
- Permit systems
- Car counts at access points
- Interviews with managers of boat liveries, outfitters, campgrounds, and bait-and-tackle shops
- Surveys of trail users

Look for changes in vegetative cover and soil compaction at campsites and other land-based sites. Use photo stations and measurements to evaluate impacts.

Measure social impacts by asking users about encounters with other visitors on the water and at campsites and about their perceptions of the trail experience. Use the USDA Forest Service's Limits of Acceptable Change guidelines to evaluate and manage the land's carrying capacity.

#### Conservation and Restoration Projects

Help local and state conservation agencies monitor water quality and restore habitats. Conduct fisheries surveys, check for invasive plants and animals, protect endangered species, and look for beneficial plants like submerged aquatic vegetation (SAV). Conduct semiannual drives to remove litter and trash along the waterway. Help pinpoint water pollution problems by surveying aquatic insect populations and conducting bacteria, nitrogen, oxygen, salinity, and turbidity tests.

#### Leave No Trace

The Leave No Trace Code of Outdoors Ethics program is a good way to teach low-impact use of the trail to children and adults. Promote these seven LNT principles in brochures, trail guides, signs and exhibits (see <http://www.lnt.org>) for more information):

- Plan ahead and prepare
- Travel and camp on durable surfaces
- Dispose of waste properly

- Leave what you find
- Minimize campfire impacts
- Respect wildlife
- Be considerate of others

### Paddling Trips or Sojourns

Conduct multi-day paddling trips that include camping overnight at various locations, festive meals, educational talks, and informal meetings with elected officials to celebrate the waterway and to build an educated constituency (see <http://www.pawatersheds.org> for their Sojourn Organizers Guide).

Some groups, such as the Harrisburg, Pennsylvania chapter of the Sierra Club, take inner city youngsters on paddling trips along a river trail after completing a three-day Red Cross canoeing course.

Other groups sponsor canoe races, learn-to-paddle days, and boating safety courses. At Pennsylvania's Lehigh River, the Wildlands Conservancy promotes a bikes-and-boat event. Visitors paddle down a water trail and then hop on a rental bike to return upstream via a riverside trail.

### Natural and Cultural Heritage Programs

Conduct interpretive programs focusing on the local archeological, historical, and natural history features to enhance the community's awareness of why people settled along waterways and the importance they play in their day-to-day lives. Use professional outfitters, as well as your own staff members and volunteers, to serve as interpretive guides. Ask local birders to conduct bird watching excursions on the waterway and on adjacent lands—a good way to attract families and cultivate stewardship attitudes.

Besides conducting guided programs, consider developing a series of interpretive wayside exhibits about early settlements, water-powered mills, American Indian villages, canals, bridges, river crossings, and maritime history.

### Festivals and Celebrations

Sponsor and participate in river and water festivals and reenactments to attract people who may not otherwise visit a water trail or waterfront to interest them in your trail and provide information about conservation issues. Share the spotlight and the workload with outfitters, fishing and boating businesses and organizations, and parks and recreation agencies.

### Recreation

Do not forget that water trails attract many individuals who are more interested in the physical recreational aspects of using a water trail than they are in learning about its natural and historic features. They may enjoy the pure pleasure of getting some exercise and getting away from their workaday worlds by paddling down a scenic waterway. Similarly, some people may use your water trail to spend a day fishing from their boat or canoe or from a favorite spot along the banks. They, too, may become some of the trail's strongest supporters.

## Boat Shows

Participate in area boat shows to provide information about your water trail and its relationship to the ecology of the Chesapeake Bay.

NOTE: These websites contain information on water quality monitoring:

- US Environmental Protection Agency ([www.epa.gov](http://www.epa.gov))
- Alliance for the Chesapeake Bay ([www.acb-online.org](http://www.acb-online.org))
- Chesapeake Bay Foundation ([www.cbf.org](http://www.cbf.org))

The Ocean Conservancy sponsors the International Coastal Cleanup in which local groups clean up riverways and marine shores. The results are forwarded to the Conservancy, which publishes the data: ([www.oceanconservancy.org](http://www.oceanconservancy.org))

Each spring the Pennsylvania Department of Environmental Protection ([www.dep.state.pa.us](http://www.dep.state.pa.us)) sponsors the Watershed Snapshot in which youngsters and adults engage in aquatic monitoring activities.

For information about cleaning up waterways and shorelines:

- American Outdoors: (<http://www.nationalrivercleanup.com/>)
- Sierra Club: (<http://www.sierraclub.org/ico/index.asp>)
- Water Keeper Alliance: (<http://www.waterkeeper.org/maineducation.aspx>)

Every year the Chesapeake Bay Foundation and other partners coordinate an SAV Hunt that requires many volunteers: ([www.cbf.org](http://www.cbf.org))

NOAA Community-Based Habitat Restoration Program:  
([www.nmfs.noaa.gov/habitat/restoration](http://www.nmfs.noaa.gov/habitat/restoration))

For information on dam removal, contact American Rivers: ([www.americanrivers.org](http://www.americanrivers.org))

For more information on restoration in your watershed, contact your state natural resources agency and county conservation district. The Chesapeake Bay Foundation ([www.cbf.org](http://www.cbf.org)) and the Alliance for the Chesapeake Bay ([www.AllianceChesBay.org](http://www.AllianceChesBay.org)) are two regional nonprofit organizations that also have broad experience in restoration.

The USDA Forest Service's pocket-sized *Trail Construction and Maintenance Notebook* is useful in the field: USDA-FS, Missoula Technology & Development Center, Building 1, Fort Missoula, Missoula, MT 59804-7294.

Download a copy of *Stream Corridor Restoration – Principles, Processes, and Practices*, produced by a federal interagency group: ([http://www.usda.gov/stream\\_restoration/](http://www.usda.gov/stream_restoration/))

Contact these organizations for educational programming information:

- Mid-Hudson Children's Museum: ([www.mhcm.org](http://www.mhcm.org))
- Earth Force: ([www.earthforce.org](http://www.earthforce.org))
- Stroud Water Research Center: ([www.stroudcenter.org](http://www.stroudcenter.org))

- Clearwater Education Center: ([www.clearwater.org](http://www.clearwater.org))
- Sierra Club Inner City Outings: ([www.sierraclub.org/ico/index.asp](http://www.sierraclub.org/ico/index.asp))
- Youth Outdoor Adventure Program/Penn. Environmental Council: ([www.pecpa.org](http://www.pecpa.org))
- Leave No Trace program: ([www.LeaveNoTrace.org](http://www.LeaveNoTrace.org))

For information about waterway trips, visit the Alliance for the Chesapeake Bay: ([www.AllianceChesBay.org](http://www.AllianceChesBay.org)) and the Pennsylvania Organization for Watersheds and Rivers ([www.pawatersheds.org](http://www.pawatersheds.org))

Additional sources of water trail information:

- American Canoe Association: ([www.aca-paddler.org](http://www.aca-paddler.org))
- American Outdoors: ([www.american-outdoors.com](http://www.american-outdoors.com))
- American Whitewater: ([www.americanwhitewater.org](http://www.americanwhitewater.org))
- Chesapeake Light Craft: ([www.clcboats.com](http://www.clcboats.com))
- East Coast Canoe and Kayak Festival: ([www.ccprc.com/specialeckkayak.org](http://www.ccprc.com/specialeckkayak.org))
- Professional Paddlesports Association: ([www.propaddle.com](http://www.propaddle.com))
- South Carolina Department of Parks, Recreation and Tourism: ([www.discoversouthcarolina.com](http://www.discoversouthcarolina.com))
- The Trade Association of Paddlesports: ([www.gopaddle.org](http://www.gopaddle.org))
- West Coast Sea Kayak Symposium: ([www.wcsks.org](http://www.wcsks.org))

## Workboats and Tools

More than likely your organization will need a workboat to carry out some maintenance work and monitoring activities on the water trail. Several kinds of watercraft are available, but some make better workboats than others.

Large, stable canoes are suitable for paddle trails, but freight canoes with transoms for small gasoline engines or electric motors are better.

For trails on large lakes or the ocean, make sure the boat is large enough to go safely through choppy waters and powerful enough to cover long distances at reasonable speeds when the boat is loaded. Aluminum boats are a good choice, because they are relatively light and they can withstand repeated beachings. They also can be powered by relatively small gasoline engines or electric motors and can be easily towed and launched.

Make sure your workboat operators are well trained not only to operate the boat but also to care for the boat, gear, and trailer. The handbook, *North American Water Trails*, has additional information about workboats.

## Hand and Power Tools

Maintenance crews need a variety of hand and power tools. You may be able to obtain some of them through federal, state, and local technical assistance programs and donations from partners and businesses.

Here is a basic list of tools:

- rakes
- shovels
- Pulaskis
- weed whips
- brace and bits
- axes
- rock bars
- scythes
- cutter mattock
- bow saws
- lopping shears
- peaveys
- chainsaws
- brush saws
- files
- sharpening stones
- screwdrivers
- wrenches
- pliers
- vice grips
- socket sets

Maintenance crews also will need cleaning supplies for toilets, paint and brushes, lubricants, garbage bags, hardware, and lumber.

## Safety Equipment

Equip maintenance crews with safety pants, gloves, and boots; hard hats with ear and face protection for work with chainsaws; rubber gloves for handling human waste; and well-stocked

first aid kits.

Make sure the work crews receive training in the use of all equipment and in wilderness first aid and CPR.

For more information, see the Student Conservation Association's *Lightly on the Land: The SCA Trail-Building and Maintenance Manual*, published by The Mountaineers, 1001 SW Klickitat Way, Seattle, WA 98134, and visit ([www.redcross.org](http://www.redcross.org)) and (<http://wfa.net>).

## **APPENDIX Q:**

### **2009 CHESAPEAKE BAY GATEWAYS AND WATERTRAILS NETWORK - GRANT GUIDELINES & APPLICATION INSTRUCTIONS**

#### **Chesapeake Bay Gateways and Watertrails Network**

#### **2009 Grant Guidelines and Application Instructions**

**Applications Due: NOON Friday, April 17, 2009**

**Chesapeake Bay Gateways and Watertrails Network**  
**National Park Service**  
**Chesapeake Bay Office**  
**410 Severn Avenue, Suite 109**  
**Annapolis, MD 21403**  
**1-800-YOUR-BAY**  
[www.baygateways.net](http://www.baygateways.net)

**The Chesapeake Bay Gateways and Watertrails Network is a partnership system of over 160 parks, wildlife refuges, historic communities, maritime museums and water trails in the Chesapeake Bay watershed. These are the places visitors explore, enjoy and learn about the Chesapeake Bay and its rivers. The Gateways Network is coordinated by the National Park Service to inspire public appreciation of the Bay as a national treasure and to foster Chesapeake stewardship.**

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Additional critical application materials are available on the Gateways web site at [www.baygateways.net/grants.cfm](http://www.baygateways.net/grants.cfm) including:

- 2009 Gateways Grant Application Form
- Environmental & Cultural Analysis Checklist
- Sample Scope of Work - Task and Schedule List (and Blank Form)
- Sample Scope of Work – Project Deliverables (and Blank Form)
- Sample Proposal Budget

## **What Is the CBGN Grant Program? -- A Summary**

Chesapeake Bay Gateways and Watertrails (CBGN) Network grants assist designated Chesapeake Bay Gateways in implementing high-quality interpretation, access, or conservation and restoration projects that advance Network goals. Gateways grants also support key Network-wide initiatives. Information on the Chesapeake Bay Gateways and Watertrails Network, designated Gateways, and how to participate in the Network as a Gateway may be found at [www.baygateways.net/join.cfm](http://www.baygateways.net/join.cfm).

Gateways grants are available for projects at all designated Gateways participating in the Chesapeake Bay Gateways and Watertrails Network as of the grant application deadline. For detailed information on what constitutes a designated Gateway, see Who May Apply for Gateways Grants below or the Gateways website as above.

Grants may be used for a variety of projects at Gateways which support Network goals—to help people understand the Chesapeake Bay and its watershed through its special places and stories

- gain access to those places and resources
- experience conservation stewardship and be motivated to get involved

Successful proposals will demonstrate strong connections to the Network's goals and clearly advance the ability of the applicant to serve as an effective Gateway.

The National Park Service will provide federally-funded grants ranging from \$5,000 to \$150,000. Applicants MUST match the request with at least an equal contribution of non-federal funds and/or in-kind contributions of services or materials. Other federal funds may not be counted towards the minimum 1:1 match requirement.

Applicants will be required to complete their project within 20-24 months after a grant is awarded.

**Grant application packages must be received (not postmarked) by NOON, Friday, April 17, 2009.** The target for initiating projects is August 1, 2009.

## **Who May Apply for Gateways Grants?**

Gateways grants are intended to assist projects at locations participating in the Chesapeake Bay Gateways Watertrails Network as designated Gateways.\* All currently designated Gateways are eligible to apply for grants. ***If you are not yet a designated Gateway, you will not be eligible to participate in this grant round.*** For a list of designated Gateways visit [www.baygateways.net](http://www.baygateways.net).

*\* Gateways are designated through a nomination process entirely separate from the review of grant proposals. Information about the nomination process may be found at [www.baygateways.net/join.cfm](http://www.baygateways.net/join.cfm). Please note that the Gateways Network is not accepting new nominations at this time.*

Grant applications may be submitted by either the managing organization for a designated Gateway, or a partner organization designated to carry out the project at the Gateway. However, the applicant must be either a non-profit organization qualified as such under section 501(c) of the Internal Revenue Code or a state or local government.

For Federally Managed Gateways: Only a non-federal applicant may submit an application for projects on federal lands. Further, the non-federal applicant must be fully and directly responsible for implementing and carrying out the ongoing management of the project; however, other partners may contribute to elements of the project.

Applicants with Ongoing Grants: To be considered for a new grant project in 2009, the incomplete outstanding grant project funded in 2007 or 2008 **MUST** be on schedule for completion within the agreed time frame and all reports must be current.

### **What Kinds of Projects Can be Funded?**

The critical purpose of Gateways as described in the “Chesapeake Bay Initiative Act of 1998” that established the Chesapeake Bay Gateways and Watertrails Network is to “enhance public education of and access to the Chesapeake Bay.” So too then, the critical purpose of Gateways grants is to help your site become a more effective Gateway to the Chesapeake.

Grants may be used for a variety of projects that support the Gateways Network goals.

Each individual Gateway must help tell a part of the story of the Chesapeake Bay. Gateways grant projects can aid you in telling your Gateway’s part of the Chesapeake Bay story, and in fitting your resources and stories into the larger context of the Chesapeake Bay.

Gateway grants can also be applied to physical improvements and/or information that helps people use or access your Gateway.

Grants can support efforts to conserve and restore natural, cultural and/or historic resources that are central to understanding your Gateway’s relationship to the Chesapeake.

Grants projects that actively involve citizen volunteers not only improve Bay resources, but help participants gain a deeper appreciation for the Chesapeake.

### **Eligible Categories for Submission**

In 2009, we will **ONLY** accept grant proposals in the following categories:

***Projects that promote a broadly applicable stewardship ethic and actively foster citizen stewardship of the Chesapeake.***

*What kinds of projects are eligible?*

- Projects that demonstrate and promote exemplary conservation stewardship and sustainability and serve as models for others to follow.
- Restoration, conservation and preservation projects that incorporate and build on-going volunteer/visitor involvement.
- Interpretive or educational programming at sites that provide visitors with information on their role in Chesapeake stewardship.

***Projects that clearly aid in telling your Gateway's part of the Chesapeake Bay story.***

*What kinds of projects are eligible?*

- Planning projects that help new or developing Gateways evaluate and establish thematic priorities, visitor experience objectives and interpretive techniques for connecting their resources and stories into the larger context of the Chesapeake Bay.
- Clearly defined products (especially ones prioritized in an interpretive plan) that help people understand how your Gateway relates to the Chesapeake Bay.

Note: All projects involving any interpretation must in some way relate stories or themes to the Chesapeake Bay and/or the Bay watershed. In other words "the Chesapeake Connection" must be clear to both the grant reviewers and ultimately to visitors. For more information, the interpretive themes outlined in the Chesapeake Bay Gateways Network Framework at [www.baygateways.net/pubs.cfm](http://www.baygateways.net/pubs.cfm) help organize these relationships.

***Projects to further the development and sustainability of water trails throughout the Chesapeake Bay watershed.***

*What kinds of projects are eligible?*

- Projects that help developing water trails fulfill baseline developmental needs (including a complete map & guide, safety and orientation signage at access points and sufficient access points and services for anticipated visitor use).
- Projects that incorporate and build on-going volunteer/visitor involvement, particularly in restoration, conservation and preservation of the water trail.
- Projects that create innovative and substantial interpretation conveying the route's themes and drawing clear relationships to the Chesapeake Bay and its watershed.

***Projects to improve access, interpretation and education at Gateways along the Captain John Smith Chesapeake National Historical Trail (CAJO) or the Star-Spangled Banner National Historic Trail (STSP).***

*What kinds of projects are eligible?*

- Access to resources on the historic routes; including
  - Land to water and water to land access
  - Waterfront recreational features
  - Walking trails or driving loops to land-based resources (including but not limited to Gateways)
- Interpretive or educational programming at sites that are on the routes or near the routes.

*Note: For projects that develop new interpretive or educational programming related to CAJO or STSP, the NPS may be interested to work with grantees to incorporate material whole or in part into CAJO- or STSP-related web sites or to adapt for other interpretive programming.*

### **What Is Not Funded?**

Activities that Gateways grants do not fund include the following:

- general operating budgets or routine operational costs of a Gateway, facility or program (this means anything not directly part of producing the specific outcomes or products of the proposal)
- routine or deferred maintenance
- construction of new buildings or major renovation of existing buildings (such as visitor or interpretive centers, restrooms, pavilions, etc.)
- basic park or streetscaping amenities (e.g., gazebos, streetlights, benches)
- construction or purchase of vehicles, boats or other watercraft
- land acquisition
- projects not associated with a designated Gateway

With rare exception, the above activities should also not be included as part of the proposed non-federal match.

### **Required Approaches for All Proposals**

Several approaches to carrying out projects are key to achieving Chesapeake Bay Gateways Network goals. Proposals must fully incorporate these approaches in any relevant project:

***Gateways Network Graphics Standards:*** All projects resulting in publications or signage must incorporate the Gateways Network graphic design standards. This flexible system is detailed in the Gateways Network Graphics Style Manual on the Gateways website at [www.baygateways.net/graphicstandards.cfm](http://www.baygateways.net/graphicstandards.cfm).

In addition, all projects involving publications, maps and exhibits must use a qualified, professionally trained graphic designer. Note that some detailed maps, such as water trail maps, may require a trained cartographer as well.

**Gateways Network Interpretive Themes:** All projects involving any interpretation must in some way relate stories or themes to the Chesapeake Bay and/or the Bay watershed. In other words “the Chesapeake Connection” must be clear to both the grant reviewers and ultimately to visitors. The Gateways Network interpretive themes outlined in the *Gateways Framework* help organize these relationships. There are many ways of developing this kind of interpretation. In addition, a short basic message about the Gateways Network must be included in all publications and signage.

**Pre-testing for Interpretive Products:** Projects that significantly impact a site's interpretive program *may* be required to incorporate "pre-testing" to better ensure effective interpretation. Such projects could include, but are not limited to: large interpretive exhibits, large-scale wayside exhibit projects, audio-visual media presentations, and major publications. Pre-testing draft material with sampled members of the target audience is intended to determine whether the desired interpretive messages are being successfully communicated to the audience through the proposed media. The results of pre-testing are used to make any needed revisions to the proposed media. A determination on whether pre-testing is required for a specific project will be made during the application review process. However, added weight will be given to projects that incorporate pre-testing strategies within the initial proposal.

**Watershed-friendly Development:** All projects involving any physical or structural development, ground disturbance or landscaping must apply principles of sound, low-impact site development and environmentally sensitive design, including the use of vegetation native to the project area if any plantings are involved.

**Gateways Staff Review:** The Scope of Work – Task & Schedule List must incorporate National Park Service staff review at key developmental stages (e.g., development drafts of interpretive exhibits, design drawings, landscaping plans, planting plans, etc.).

**CBGN Goals, Outcomes & Measures:** It is critical for the Gateways Network to measure the outcomes of 2009 Gateways grants as part of demonstrating the contributions that grant funded projects make toward CBGN goals. All proposals must indicate the measurable results that are expected to result from the project. At a minimum 2009 grantees **MUST** collect data on measurable results of the CBGN grants, such as:

- The value of funds and in kind services that have been generated or leveraged
- Number of volunteer hours generated
- The number of exhibits, interpretive brochures, educational programs, and other interpretive and educational opportunities generated
- The number of land trails created and the total number of miles of trail
- The number of water trails created and the total number of miles of water trails
- The amount of CBGN information and visit planning services requested at RICs and Hubs

**Curriculum-Based Educational Programs:** Projects can support the start-up a new curriculum-based educational program or support the revision of an established

program that actively engages K-12 students in meaningful watershed education experiences at Gateways.

The Gateways grant should be viewed as "seed money"—a one-time funding source to establish an educational program. The resulting educational program should not be dependent on multi-year funding from this source.

Effective curriculum-based programs typically involve some level of each of the following components:

- *Educational Resources:* Curriculum-based lesson plans, teaching guides and student hand-outs explain the significance of a Gateway and relate it to the subject(s) students are studying. These resources help teachers reinforce concepts with real-life applications.
- *Teacher Training:* Teachers need to be active participants in the program. Workshops, seminars, or other training should enable them to integrate site lessons with their curriculum through pre- and post-visit learning activities.
- *Student Field Trips:* On-site investigations of Gateway resources bring science, history and other concepts to life in a variety of ways. Hands-on learning fosters critical thinking and an interdisciplinary approach and reinforces concepts learned in the classroom.
- *Evaluation:* A method for evaluating the impact of a program should be built in to the program itself. Useful evaluation assesses both numbers of students and teachers participating and some qualitative measure of educational impact.
- Proposals may focus in on one component or address all or multiple components. However, it should be clear how the proposed program will accomplish all components over its planned lifespan.

**Curriculum-Based:** Proposed programs must relate to both the Gateway's interpretive goals and themes and an established curriculum for the target grade(s). Using sections 2, 6 and 8 of the 2009 Application Form, address:

- How does the proposal relate to established school curriculum?
- How does the program incorporate any national, state, or local standards of learning (SOLs)?
- What relationships have been established between the Gateway and target schools or districts to assure the utilization of the program?
- How have/will educators participate in the development of the program?
- How have/will resource experts participate in the development of the program?
- **Program Impact:** Proposals should offer an overall impact on the Gateways Network, the Gateway, school and community. Using section 3 of the 2009 Application Form, address:
- What direct effect will the project have on Gateways Network goals? Are their Network-wide implications? How will other Gateways directly benefit from the program? What efforts have been made to include other Gateways, with similar themes, in the program planning process?
- How many students/teachers will realistically benefit from the program?

- What efforts are being made to reach out to under-served or non-traditional audiences?
- What possibilities exist for adapting the program for use by other groups, such as scouts or boys/girls clubs?

### **What Are the Grant Levels & Funding Requirements?**

**Grant Levels:** The minimum grant request is \$5,000. The maximum grant request is \$150,000. All grant proposals must demonstrate a reasonable budget analysis ensuring the project can be completed within the proposed budget. Experience has shown that a number of smaller proposals tend to be under-budgeted.

Grant proposals over \$100,000 should pertain to complex, highly visible projects including major enhancements for public access, extensive development or renovation of exhibits, conservation of important cultural resources, or development of model habitat restoration areas with ample interpretive components.

Grants may be awarded at a level below the full amount requested. Grant payments to successful applicants will occur on a reimbursement basis after costs have been incurred.

**Matching Fund Requirements:** The requested funds must be matched by an equal (1:1) or greater amount of non-federal support. The matching share may include in-kind contributions of services or materials, cash or revenue sources dedicated to the same project. Other Federal funds (including Federal employee work time) may not be used as a matching share. The matching share and any work funded or provided by non-federal funds are considered part of the overall project. There must be a close relationship between all aspects of the project, including those supported by the non-federal match. Elements which are functionally unrelated to the core project should not be included in the match. All project costs, both grant funded and matching, must occur within the 20-24 month grant period. Costs from either before or after the grant period may generally not be included.

Projects for which the matching share exceeds 50% may receive additional consideration. Applicants will be required to document the matching share commitment prior to final grant approval. For more details, see Calculating Matching Funds below.

**Limits on Administrative Costs:** The Chesapeake Bay Initiative Act of 1998 requires that no more than 10% of direct project costs can be applied to administration (indirect costs.)

### **When are Proposals Due?**

- Grant application packages **must be received by NOON, Friday, April 17, 2009**. This is **not** a postmark deadline.

- Notification to successful applicants: approximately May 15, 2009
- Final information package (as needed) due from successful applicants: May 22, 2009
- Anticipated start date of grant projects: August 1, 2009 (*Confirmation of actual start date will be provided by Gateways Network staff.*)
- Project completion date: **20-24 months after grant award**

### **How will Proposals be Reviewed?**

Grant proposals are reviewed by Gateways Network Working Group members and National Park Service staff. Proposals **MUST** be specifically appropriate to the 2009 eligible categories (see page 5). Proposals will be further evaluated on the basis of their:

- Contributions/measurable results toward established Gateways Network goals
- Clarity of project objectives and deliverables, and the plans for sustaining them over time
- Clarity and credibility of the project's scope of work, deliverables, timeline and budget
- Importance in contributing to a Gateway's effectiveness in enhancing public education of and access to the Chesapeake Bay

### **Competitiveness**

In all cases, grant project proposals will be judged strongest when they:

- Support multiple Network goals as described above. For example:
  - a stewardship project that has an interpretive component;
  - an access enhancement project that is constructed by volunteers; or
  - a project to develop a new segment of water trail that will be a contributing segment of the CAJO and/or STSP
- Enhance the Gateways and Watertrails Network as a whole. For example:
  - Cooperative project proposals that involve multiple Gateways in development and implementation to build working relationships;
  - projects that have clear demonstration value for other Gateways; or
  - products that are transferable or easily customized for use by other Gateways
- Directly involve citizen volunteers in project development and implementation to build their understanding and appreciation of Chesapeake Bay resources and stewardship.

- Include specific objectives to “green” the project, such as developing environmentally sensitive designs, incorporating low impact development approaches (e.g., incorporating green roofs and rain gardens, reducing impervious surfaces, etc.), incorporating eco-friendly materials into structural elements of your project, and using green procurement practices (e.g., buying recycled and recyclable materials and/or recycling existing materials for use in your project).
- Offer a significant leveraging of Federal funds in excess of the minimum qualifying requirement of a 1:1 non Federal match

### **Tips for Better Proposals**

Here are some things we look for in effective grant proposals. Examples of the items in bold type may be found at [www.baygateways.net/granttips.cfm](http://www.baygateways.net/granttips.cfm):

- A well thought out description of what you want to do and the specific scope of work that will accomplish it
- A clear description of how your project will advance **Gateways Network goals** and outcomes and improve your ability to function as a Gateway, with **measurable examples** and a clear means for tracking use post implementation
- Clearly defined products that help people understand how your Gateway relates to the Chesapeake Bay
- **Effective distribution strategies** for making sure any print and audio-visual materials get into the hands of the intended audiences
- Projects building involvement in Chesapeake stewardship and your Gateway
- A detailed and realistic budget with appropriate types of committed matching funds and/or in-kind services
- Use of professionally trained contractors or volunteers for any graphic design needs (such as signage, exhibit or publication design) is required; it is helpful to include a list of key experience for any such volunteers
- **Volunteers** helping to carry out the project
- A strong relationship between requested grant funds and any proposed matching costs
- Clear thought given to how you will ensure the **sustainability of your project** after the end of the grant period (e.g., how it will be maintained, reprinted, etc.)

Note: Also see Sharpening Your Project Focus: Tips for More Competitive Proposals at [www.baygateways.net/grants.cfm](http://www.baygateways.net/grants.cfm)

Here are some things to avoid in a proposal:

- Including any items listed in these guidelines as “not funded”
- Requesting grant funds to cover the salaries of upper level managers involved in the project
- Vague descriptions of intended products or the steps for developing them
- Messy or unorganized materials

- Supplementary information (maps and other graphic materials, etc.) that exceeds the size limitations described in the section below.
- Projects that cannot be completed within 20-24 months
- Unrealistic cost estimates
- Requesting funds in excess of the maximum grant level

## **What Goes In the Proposal?**

### ***Key Requirements:***

- **Fifteen (15) paper copies** of your complete grant proposal and **one (1) electronic copy** (disk or CD) of your grant application, budget and scope of work-task & schedule and project deliverables **must be received by** the National Park Service Chesapeake Bay Office by **Noon, Friday, April 17, 2009**. Late, faxed, e-mailed or incomplete applications will not be considered.
- It is suggested that the entire grant package not exceed 15 pages.
- Attachments must be on **8 ½" x 11" paper and legible when copied on a black & white copier**. If you have a printed attachment that absolutely cannot fit this format, you must provide 15 copies along with your proposal.

***Proposal Checklist:*** A complete proposal includes the following elements:

#### Cover Letter **(required)**

- Gateways Grant Application Form -- Narrative **(required)**
- Proposal Budget **(required)**
- Scope of Work - Task & Schedule List **(required)**
- Scope of Work – Project Deliverables **(required)**
- Site map showing project location **(required)**
- Supporting Information **(required)**
- Completed Environmental & Cultural Analysis Checklist **(required)**
- Copy of cover letter to State Historic Preservation Officer conveying the Environmental & Cultural Analysis Checklist **(required)**
- Copy of cover letter submitted for Intergovernmental Review **(required, if applicable)**

- ❑ Other supplementary information (**optional, but should be included only if essential for illustrating your proposal**)

**Cover Letter:** The cover letter should be addressed to:

John Maounis, Superintendent  
National Park Service  
Chesapeake Bay Office  
410 Severn Avenue, Suite 109  
Annapolis, MD 21403

The cover letter **MUST:**

- **be signed by the chief executive of the applicant's agency or organization**
- **state the designated or nominated Gateway associated with the proposal**
- **identify the eligible category(s) and briefly, but specifically state how your project relates to the eligible category(s)**
- **certify intent to comply with all grant program guidelines**
- **acknowledge that any required NEPA and/or Section 106 analysis steps are included within the project proposal**

**Gateways Grant Application Form:** The Gateways Grant Application Form includes a cover sheet and a series of detailed narratives about your proposal. This application, along with your project budget, is the heart of your proposal and the primary basis on which it will be evaluated.

The Gateways Grant Application Form is available as a hard copy or in electronic formats. For electronic formats visit the Gateways website for either a .pdf file or Microsoft Word version. Once you have completed the application, submit one electronic copy on a CD or disk and fifteen (15) printed copies along with the rest of the proposal materials.

**Cover Sheet:** The cover sheet requests basic information about the project, the Gateway and the applicant. In addition to standard contact information, the cover sheet also requires each applicant's DUNS Number. If you do not have a DUNS Number, you can find information about how to acquire one at [www.baygateways.net/grantmanagement.cfm](http://www.baygateways.net/grantmanagement.cfm) under "Cooperative Agreement Financial Registration Instructions."

Applicants **MUST** have a DUNS # and be registered on the Central Contractor Registration (CCR). You will not be eligible to receive funds if you do not have a DUNS # and if your registration with the CCR is not current through the end of July, 2009. There are instructions concerning both these items on the website under Financial and Reporting Information at [www.baygateways.net/grantmanagement.cfm](http://www.baygateways.net/grantmanagement.cfm)

**Proposal Narratives:** The application form provides a series of categories essential to the description of your proposal. Specific guidance for each category is provided on the form itself.

**Proposal Budget:** Your budget is an extremely important part of your proposal. You must submit a detailed project budget showing line item costs and funding sources. We strongly encourage you to use the sample budget provided on the Gateways web site at [www.baygateways.net/grants.cfm](http://www.baygateways.net/grants.cfm) as a model format. The budget must show costs of all key aspects of the project as well as all sources of matching funds or in-kind services.

**Scope of Work - Task & Schedule List and Project Deliverables:** Your description of the scope of work for your proposal (including tasks, products/deliverables, responsibilities and schedule) shows how organized you are to carry out the project. You must submit detailed scopes of work, both task & schedule list and project deliverables. Samples of each, along with Microsoft Word versions formatted for your use are provided on the Gateways web site at [www.baygateways.net/grants.cfm](http://www.baygateways.net/grants.cfm).

**Site Map Showing Project Location:** For all projects, a site map identifying the project location and showing the project area in the context of its surrounding community, town or area MUST be provided.

**Supporting Information:** Including the following supporting information is **essential**:

Letters or other evidence from co-funders documenting matching fund commitments. (**Note:** If unable to submit at the time of application, the matching fund commitment **must** be documented before final grant approval.)

- Letters or other evidence of commitment to the project from key project implementation partners and individuals who will be responsible for carrying out the project.

**Other Supplementary Information:** Other supporting graphics (maps, photographs, drawings) that explain the project may be provided, but should be essential to illustrating your proposal.

All graphic and supplementary materials must be submitted in an 8 ½" X 11" format and legible when subsequently copied on a black and white copier. If you have a printed attachment that absolutely cannot fit this format, you must provide 15 copies along with your proposal. Do not submit videos, CDs, or other audio-visual media with your application unless they are specific examples for an audio-visual project you are proposing.

**Environmental and Cultural Analysis Requirements: (Note: Early Attention Highly Recommended!)** Gateways Grants must meet certain requirements designed to minimize potential impacts on the human environment and historic resources.

At the earliest possible opportunity - before preparing your full grant application - please follow the steps described below to determine what type of environmental or cultural analysis requirements your proposal may require under the National Environmental Policy Act of 1969 (NEPA) and Section 106 of the National Historic Preservation Act of 1966 (NHPA).

(1) Fill out the “Environmental & Cultural Analysis Checklist” provided in Appendix C and on the Gateways website. If you have any questions about the checklist, or do not know the answers to some of the questions, be sure to go over these with a Gateways staff member (see step 2).

(2) Contact a NPS Gateways staff member to discuss your completed checklist (see contact information under “Grant Questions?” below). If your project requires some type of local, state or federal permit to proceed, please be sure to share the status of your permitting with Gateways staff when you call. Based on your checklist, Gateways staff will advise you on whether your proposal:

- is likely to be “categorically excluded” from further environmental or cultural analysis requirements under NEPA and NHPA;
- may require further analysis under NEPA and NHPA; or
- some additional information is needed to make the decision.

(3) Submit your Environmental & Cultural Analysis Checklist along with a map of the project location and a cover letter to your State Historic Preservation Officer (see contact information in Appendix B) **and** submit copies of the checklist and your letter with your Gateways Grant application.

(4a) If your proposal appears to be categorically excluded your State Historic Preservation Officer (SHPO) will reply with their concurrence. **-OR-**

(4b) If your checklist indicates the potential for environmental or cultural impact, your proposal will require further environmental or cultural analysis, possibly through either an environmental assessment (EA) and/or consultation with your State Historic Preservation Officer (SHPO). NPS Gateways staff and the SHPO will consult with you about any necessary steps you may need to take in order for your grant proposal to be considered. You will need to incorporate any necessary steps in your proposal, and make adjustments to your tasklist and timeline to accommodate compliance steps.

**State Historic Preservation Officers:**

**Delaware:**

Mr. Timothy A. Slavin, SHPO  
Division of Historical and Cultural Affairs  
21 The Green  
Dover, DE 19901

**Pennsylvania:**

Barbara Franco, SHPO  
Pennsylvania Historical and  
Museum Commission  
300 North Street

Telephone: 302-739-5313  
Fax: 302-739-6711

Harrisburg, PA 17120  
Telephone: (717) 787-2891  
Fax: (717) 705-0482

**District of Columbia:**

Mr. David Maloney, SHPO  
Historic Preservation Office  
Reeves Center, 2000 14<sup>th</sup> Street, NW #4000  
Department of Historic Resources  
Washington, DC 20009  
Telephone: 202-442-8800  
Fax: 202-741-5246

**Virginia:**

Ms. Kathleen Kilpatrick, SHPO  
Historic Preservation Office  
2801 Kensington Avenue  
Richmond, VA 23221  
Telephone: (804) 367-2323  
Fax: (804) 367-2391

**Maryland:**

Mr. J. Rodney Little, SHPO  
Maryland Historical Trust  
100 Community Place, 3rd Floor  
Crownsville, MD 21032-2023  
Telephone: 410-514-7600  
Fax: 410-514-7678

**West Virginia:**

Mr. Randall Reid-Smith, SHPO  
West Virginia Division of Culture & History  
Historic Preservation Office  
1900 Kanawha Boulevard East  
Charleston, WV 25305-0300  
Telephone: (304) 558-0220  
Fax: (304) 558-2779

**New York:**

Ms. Carol Ash, SHPO  
Parks, Recreation & Historic Preservation  
Agency Building #1  
Empire State Plaza  
Albany, NY 12238  
Phone: 518-474-0443

***Intergovernmental Review:*** To facilitate coordination of Gateways grants with state programs, some states participate in an “intergovernmental review” process. Participating states are listed at [www.whitehouse.gov/omb/grants/spoc.html](http://www.whitehouse.gov/omb/grants/spoc.html). If your Gateway is in one of the participating states—currently **Delaware, District of Columbia, Maryland and West Virginia**—you must **submit one (1) copy of your application to the state’s “single point of contact”** at the same time you submit your application to the Gateways Network office. Omit this requirement if your Gateway is in New York, Pennsylvania or Virginia. State single points of contact (SOC) are:

**DELAWARE**

Jennifer L. Carlson  
Associate Fiscal and Policy Analyst  
Partnerships  
Office of Management and Budget  
Development  
Budget Development, Planning &  
Administration  
Haslet Armory, Third Floor

**DISTRICT OF COLUMBIA**

Donna Bexley  
D.C. Government Office of  
  
and Grants  
  
441 4<sup>th</sup> Street, NW  
Washington, D.C. 20001  
Telephone: (202) 727-6437

122 William Penn Street  
Dover, Delaware 19901  
Telephone: (302) 739-4206

<http://app.opgd.dc.gov/grantautomation/spoc.asp>

Fax: (302) 739-5661

[jennifer.carlson@state.de.us](mailto:jennifer.carlson@state.de.us)

Fax: (202) 727-1652

[Donna.bexley@dc.gov](mailto:Donna.bexley@dc.gov)

### **MARYLAND**

Linda C. Janey, J.D.  
Director, Maryland State Clearinghouse  
Development Division  
for Intergovernmental Assistance

301 West Preston Street, Room 1104  
Baltimore, Maryland 21201-2305  
Telephone: (410) 767-4490

Fax: (410) 767-4480

[ljaney@mdp.state.md.us](mailto:ljaney@mdp.state.md.us)

### **WEST VIRGINIA**

Bobby Lewis  
Director, Community

West Virginia Development Office

Building # 6, Room 553  
Charleston, West Virginia 25305  
Telephone: (304) 558-4010

Fax: (304) 558-3248

[blewis@wvdo.org](mailto:blewis@wvdo.org)

### **Grant Questions?**

**You are strongly encouraged to contact us to discuss your proposal in advance.**

Recipients of prior grants should contact their primary NPS project coordinator. First time applicants may contact any of the following staff:

Cheryl Branagan  
Phone: 410-267-9841  
Email: [cbranaga@chesapeakebay.net](mailto:cbranaga@chesapeakebay.net)

Bob Campbell  
Phone: 410-267-5747  
Email: [bcampbel@chesapeakebay.net](mailto:bcampbel@chesapeakebay.net)

Paula Degen  
Phone: 410-267-5748  
Email: [pdegen@chesapeakebay.net](mailto:pdegen@chesapeakebay.net)

Peggy Wall  
Phone: 410-267-1328  
Email: [pwall@chesapeakebay.net](mailto:pwall@chesapeakebay.net)

Additional information on the Chesapeake Bay Gateways Network and the Gateways Grants Program can be found on the Gateways website at [www.baygateways.net](http://www.baygateways.net).

### **Final Grant Approvals**

Applicants recommended for funding are anticipated to be contacted regarding next steps approximately May 15, 2009. The additional information listed below will then be required to supplement the original application. The National Park Service will clarify the final information needs and will work with the applicant in developing aspects of this information. This final information package will be due by May 22, 2009 and potentially includes:

- Final Cover Letter -- the final cover letter acknowledges the grant recipient has legal standing to enter into the grant agreement, acknowledges any compliance requirements and identifies the project contact person
- Revised budget
- Revised scope of work
- Resolution or equivalent commitments identifying that the project matching share is in place
- Final environmental and cultural analysis -- documenting that no further analysis steps are necessary, or, setting out any steps and schedule for completing any required analysis
- Project permit documentation -- providing a short description of actions and the associated schedule to obtain any permits required for implementing the project, along with any relevant correspondence between the applicant and involved agencies.

### **Calculating Matching Funds**

#### ***Allowable Costs, Matching Funds and Valuing Donations:***

Information and guidance concerning allowable costs and matching fund requirements associated with your proposal are described in OMB Circulars A-102 (Grants and Cooperative Agreements with State and Local Governments) and A-110 (Grants and Cooperative Agreements with Non-Profit Organizations). The web site addresses for each are [www.whitehouse.gov/OMB/circulars/a102/a102.html](http://www.whitehouse.gov/OMB/circulars/a102/a102.html) and [www.whitehouse.gov/OMB/circulars/a110/a110.html](http://www.whitehouse.gov/OMB/circulars/a110/a110.html), respectively.

The method for determining the value of donated goods and services to be used for the proposal's matching share requirement is described in OMB Circulars A-87 (Cost Principles for State and Local Governments) and A-122 (Cost Principles for Non-Profit Organizations). The web site addresses for each are [www.whitehouse.gov/OMB/circulars/a087/a087-all.html](http://www.whitehouse.gov/OMB/circulars/a087/a087-all.html) and [www.whitehouse.gov/omb/circulars/a122/a122.html](http://www.whitehouse.gov/omb/circulars/a122/a122.html), respectively.

Below is information excerpted from A-110 and A-122 that is important to consider in developing your proposal and project budget:

Where a funding period is specified (for Gateways grant this period is expected to run for 20-24 months beginning approximately August 1, 2009), a recipient may charge to the grant only allowable costs resulting from obligations incurred during the funding period (this includes matching share costs incurred).

All contributions, including cash and third party in-kind, shall be accepted as part of the recipient's cost sharing or matching when such contributions meet all following criteria:

- Are verifiable from the recipient's records.

- Are not included as contributions for any other federally-assisted project or program.
- Are necessary and reasonable for proper and efficient accomplishment of project program objectives.
- Are allowable under the applicable cost principles.
- Are not paid by the Federal Government under another award, except where authorized by Federal statute to be used for cost sharing or matching.
- Are provided for in the approved budget when required by the awarding agency.
- Conform to other provisions of this Circular, as applicable.

Values for recipient contributions of services and property shall be established in accordance with the applicable cost principles. Fair market value of donated services shall be computed as follows:

(a) Rates for volunteer services. Rates for volunteers shall be consistent with those regular rates paid for similar work in other activities of the organization. In cases where the kinds of skills involved are not found in other activities of the organization, the rates used shall be consistent with those paid for similar work in the labor market in which the organization competes for such skills.

(b) Services donated by other organizations. When an employer donates the services of an employee, these services shall be valued at the employee's regular rate of pay (exclusive of fringe benefits and indirect costs), provided the services are in the same skill for which the employee is normally paid. If the services are not in the same skill for which the employee is normally paid, fair market value shall be computed in accordance with subparagraph (a).

Volunteer services furnished by professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as cost sharing or matching if the service is an integral and necessary part of an approved project or program.

Donated supplies may include such items as expendable equipment, office supplies, laboratory supplies or workshop and classroom supplies. Value assessed to donated supplies included in the cost sharing or matching share shall be reasonable and shall not exceed the fair market value of the property at the time of the donation.