
“It is so known through the length and breadth of its watershed. The Bay. There is no possible confusion with any other body of water, no need for more precise description. It is, after all, the continent’s largest estuary. Its waters are rich, the main supply of oysters, crabs, clams and other seafoods for much of the Atlantic seaboard. Its shorelines cradled our first settlements. It is the Chesapeake.”

--William Warner, *Beautiful Swimmers*, 1976

Section 2: National Significance of the Chesapeake Bay

INTRODUCTION

The National Park System represents many of America’s most significant and treasured resources. In fact, having “national significance” is one of several key criteria that any new unit of the National Park System must meet.

A resource is considered nationally significant if it meets all four of the following standards:

- 1: The proposed unit is an outstanding example of a particular type of resource.
- 2: It possesses exceptional value or quality in illustrating or interpreting the natural or cultural themes of our nation’s heritage.
- 3: It offers superlative opportunities for recreation, for public use and enjoyment, or for scientific study.
- 4: It retains a high degree of integrity as a true, accurate, and relatively unspoiled example of the resource.

This study explores whether it is appropriate to represent Chesapeake Bay resources within the National Park System. Any such exploration must begin with an assessment of the Chesapeake Bay’s overall significance. Any specific concepts or places for representing the Bay within the National Park System must reflect this significance.

THE BAY’S NATIONAL SIGNIFICANCE

The Chesapeake Bay is a national treasure and a resource of international significance. The Chesapeake Bay is the largest estuary in North America and is historically one of the most productive in the world. The abundance of natural resources has fed multitudes and nurtured myriad cultures and ways of life. The Bay encompasses 2,500 square miles of water; its watershed, which includes 64,000 square miles of land in six states, is drained by over 124,000 miles of rivers and streams. The Bay watershed is an incredibly complex ecosystem of water and land, creatures and peoples, cultures and economies. It is a region of profound diversity, essential to the cultural and economic vitality of the nation. Home to more than 3,600 species of plants and animals, it is known far beyond its boundaries for its aquatic productivity and once-plentiful harvests of seafood; for its cultural diversity and richness; its extensive recreational capacity; and its scenic beauty.

Ultimately, to describe what makes the Chesapeake special, we must focus not on the individual but on the collective. As John Muir said in describing ecosystems, “When we try to pick out anything by itself, we find it hitched to everything else in the universe.” It is like this with the Chesapeake Bay. The

story of the Chesapeake is not just a story of individual places, resources, and events, but also of the region, and our nation, as a whole. It is the changing dynamics of the natural systems, the progression of events over time, and how the culture reflects the place.

To fully appreciate and understand the Bay, we must understand that the essence of the Chesapeake Bay story is found in the dynamic interconnectedness of water, place, nature and people over time. For centuries, human well-being has depended on the Bay's abundance, yet today, the Bay's well-being is dependent on human decisions and actions. Although it is one of the most studied bodies of water in the world, the Chesapeake Bay retains a spirit of mystery and unpredictability.

The Bay as a Natural Resource

A complex interaction of water, land, climate, geological formations and topographical features creates a unique ecosystem that supports the Bay's remarkable diversity and abundance. Long before humans came to the Chesapeake region, natural forces were shaping the Bay and its watershed. The Chesapeake Bay reflects a geology shaped by both cataclysmic events and the routine march of mountains to the sea, one grain of sand at a time.

The Chesapeake region contains three distinct, occasionally overlapping environmental areas or physiographic provinces. These are the Bay itself, the Coastal Plain, and the Piedmont. The Bay environment consists of deep and shallow open salt waters and the brackish waters of the lower tidal portions of rivers. The Coastal Plain bordering on the Bay consists of beaches, marshes, forests, and grasslands, growing on generally sandy or gravelly soils. This area is often called the tidewater region, since the waters along the shores rise and fall with the tide. The Piedmont region, beginning at the fall line as the upper limit of tidal influences, is characterized by mixed hardwood forests and softwood barren lands bordering on swift running freshwater rivers and streams.

The Chesapeake Bay is an estuary - a place of transition between the land and the sea, where incoming fresh water mixes with salty ocean waters driven by tidal forces. By their very nature, estuaries are places of tremendous diversity and productivity. Overall, the Chesapeake estuary is very shallow, with an average depth of about 7 meters - 10% of the area is less than a meter in depth and 20% is less than two meters. This shallowness influences the productivity of the Bay. The ability of light to penetrate the water column and reach the bottom creates an ideal habitat for living resources. Some 295 species of fish and shellfish are known to occur in the Chesapeake at various times of the year, with 32 being year-round inhabitants. Ninety percent of the Atlantic striped bass (rockfish) spawn in the Chesapeake Bay and its tributaries. Although severely depleted, nearly 40% of the U.S. commercial harvest of blue crabs comes from the Chesapeake. Approximately 2,700 species of plants have been inventoried in the Chesapeake Bay waters (the number of species of animals in flux is more difficult to estimate). The Chesapeake Bay is a major rest and feeding stop along the Atlantic Flyway for millions of migratory birds. The Bay is also winter home to more than 35% of all the waterfowl using the Atlantic Flyway. The Chesapeake Bay's abundance of

The Chesapeake Bay is nationally significant in part because it is an outstanding example of... an estuary in its natural sense, and of a unique historic and modern human development pattern that is profoundly influenced by the estuary's natural resources.

natural resources has nourished a myriad of associated cultures and has contributed to the very special Bay environment.

The Chesapeake Bay is nationally significant in part because it is an outstanding example of a particular type of resource. It is the largest estuary in North America – an outstanding example of an estuary in its natural sense, and of a unique historic and modern human development pattern that is profoundly influenced by the estuary’s natural resources.

The Bay provides an exceptional opportunity for interpreting the interdependence of cultural and natural resources, both in its modern condition and its nearly 300-year history.

The Bay as a Historical and Cultural Resource

Chesapeake Bay history encompasses thousands of years of human settlement from indigenous peoples and early colonists to new immigrants. The history of the Chesapeake is inextricably linked with this nation’s founding, growth, development, and perseverance. The Chesapeake landscape reflects settlement patterns that responded to the evolution of transportation technology, from canoe to sail to steam to railroads and highways. The Bay’s abundance, diversity of habitats, and commercially valuable species led to hundreds of human settlements along its shores, and the development of local culture and industries. Indigenous Native Americans lived along the Bay’s main and tidal river shorelines, leaving evidence of a rich diversity of cultures and adaptations to the estuary’s abundance. The early European settlements along its shores, such as Jamestown and St. Mary’s City, were among the first successful English colonial developments along the northern and mid-Atlantic coast. The Chesapeake Bay had a major influence on colonial development, the Declaration of Independence, the revolutionary period, the War of 1812, and the Civil War. Today, the Bay continues to influence 21st-century living.

The geography of the Bay and its rich, natural abundance have been a powerful incentive for commercial development, influencing the region’s economy, transportation, and productivity. From early settlement through modern times, the natural environment of the Bay and the diverse population it has attracted have given shape to distinctive cultural traditions.

Watermen, the unique term applied to those making their living from the Bay’s waters, hold a prominent place in the region’s history, economy and mystique. Working year-round, many watermen harvest oysters half the year and crabs the other half. Others harvest clams, menhaden, and other fish. Waterfowl, once present in vast flocks, supported market hunting, an extractive industry that did not long endure in the face of resource depletion.

For those who worked on the Bay, vessels and methods were developed to take full advantage of the Bay’s resources. The history of naval architecture on the Chesapeake encompasses schooners, Baltimore clippers, steamships and warships, from the nation’s first iron-hulled ship to modern designs from the Chesapeake shipyards. Private and commercial vessels have long been designed to respond to the unique Bay environment and working conditions. Skipjacks and bugeyes are widely recognized hull designs that have historically plied the Bay’s shallow waters. Centuries after the first commercial boats on the Bay, commercial shipping continues to be a driving force in the regional economy and the national and international

transportation and shipping network. The Port of Baltimore handles more than 30 million tons of cargo annually (Maryland Department of Transportation, 2003). The Port of Virginia at the gateway to the Bay is also a major force in the international shipping arena moving more than 12 million tons annually through the marine facilities (Port of Virginia, 2003).

Today, the cultural richness of the Bay region is maintained in the face of the extensive changes in contemporary society and tourism development. Distinctive dialects, stories, and superstitions are retained, and traditional trades of the watermen, shipbuilders, lighthouse keepers, farmers, and old fishermen are continued. The impressive history has been recognized locally with extensive interest in preserving historic structures and the cultural resources of the past. Today, there are more than 200 National Historic Landmarks designated around the Chesapeake Bay in Maryland, Pennsylvania, Virginia and the District of Columbia.

The Chesapeake Bay is nationally significant in part because it possesses exceptional value or quality in illustrating or interpreting the themes of our nation's natural and cultural heritage. The Bay provides an exceptional opportunity for interpreting the interdependence of cultural and natural resources, both in its modern condition and its nearly 300-year history. Over that period, the Bay has exerted an extraordinary influence on the course of United States history and development.

The Bay as a Recreational Resource

The Chesapeake Bay is within relatively easy access for tens of millions of people living in the mid-Atlantic states. For these people, it continues to be an incredible educational and recreational resource. Current and future recreational use of the Chesapeake Bay is focused on sailing and boating, fishing, cultural and natural history exploration and interpretation, and enjoyment of local foods, crafts, and hospitality. The Bay provides ideal resources and much potential for such recreation, and in recent decades, Bay-related recreation has become an economic force in the region.

Abundant opportunities for a broad range of leisure-time activities spring from the vast resources and exquisite landscapes of the Chesapeake Bay. The traditional uses of the Bay, including boating, fishing, and hunting, by long-time area residents, also attract visitors for recreation and renewal. Recreational boats now outnumber work boats in most of the Bay's communities. In 2000, there were more than 445,000 recreational boats registered in Maryland, Virginia and the District of Columbia (US Coast Guard, 2000)

One great recreational characteristic of the Bay is its soft sandy bottom. Unlike other bays such as Narragansett and San Francisco, the sandy bottom reduces the risks inherent in running aground and therefore allows boaters to explore smaller embayments and sail closer to shore. Personal watercraft, motorized boats, luxury pleasure craft, and working boats enjoy both the protection and beauty of the shorelines and the expanse of the open water.

The Bay's open waters, tidal rivers, and shorelines, as well as dozens of parks and refuges and a rapidly developing system of land and water trails, provide excellent opportunities for public use, enjoyment, education, and scientific study.

For fishermen, the diversity of the Bay enhances that greatest of all mysteries, “what is on the end of your line?” On a single fall day, a fisherman with a rod and reel has a realistic chance to catch a rockfish, bluefish, two types of trout (spotted sea trout and weakfish), flounder, spot, croaker, Spanish mackerel and white perch. In some places, there is an added bonus of two types of drum (red or black), black sea bass, cobia, yellow perch, pickerel, largemouth bass, catfish, sunfish, tautog, and other transient species.

The value of the Chesapeake Bay as a passive recreational resource cannot be overstated. To watch fish jumping, birds diving from the sky, waterfowl dabbling in the grass beds, and watermen tonging for oysters is highly enjoyable to outdoor enthusiasts interested in “nature viewing” as well as more active recreation. Being able to walk by the shoreline and see the life at the edges is gratifying and interesting to observe. You never know what will surprise you as the environment changes every hour of every day.

Present estimates are that only one to two percent of the Bay’s shoreline is publicly accessible. If you have a seaworthy boat, the Bay is openly accessible, but if you are looking for a place to wade or picnic with the family or do surf fishing, your recreational options are more limited. Interest in and commitment to the Chesapeake Bay and its associated resources are greatly affected by personal contact with the natural and cultural systems. Improved opportunities for access to the shores, waters, and associated cultural and natural resources are essential if public awareness and support is to be maintained and increased. Consequently, enhancing public access to meet escalating recreational demand is considered a priority by public and private Bay interests.

The Chesapeake Bay is nationally significant in part because it offers superlative opportunities for recreation, public use and enjoyment, and scientific study. The Bay’s open waters, tidal rivers, and shorelines, as well as dozens of parks and refuges and a rapidly developing system of land and water trails, provide excellent opportunities for public use, enjoyment, education, and scientific study.

The Bay’s Integrity Today

The future of the Chesapeake hangs in the balance. The Bay today is beautiful and teeming with life. But the Chesapeake has been losing its wonderful biodiversity and abundance for decades, symbolic of a national pattern. The Chesapeake Bay and its living resources are suffering from the cumulative effects of human use and exploitation. More than 15 million people live within the Chesapeake Bay watershed. The same resource that fed millions is now hard pressed to feed tens of millions. The same land area that has housed millions is reeling under the impacts of an ever-growing population and related development pressures. If the Bay is to retain its vitality, people must increase their efforts to reduce and prevent pollution.

New environmental attitudes, policies, and behaviors offer hope for the Bay’s protection, renewal, and sustainability. Recognizing the fragility of the ecosystem, residents, visitors, governments, and organizations have reassessed the ways in which humans interact with the Bay and its resources.

The changes resulting from this attention are helping to restore the Bay. The Chesapeake Bay is perhaps the most studied large estuary ecosystem in the world and arguably a primary model for ecosystem restoration and regional partnerships. The Chesapeake Bay Program is the model for dozens of other estuary restoration efforts nationally, including Casco Bay, Long Island Sound, Tampa Bay, Monterey Bay, Puget Sound and others. Much hope is placed on this ecosystem recovery and protection effort to serve as a model for additional regions.

The Chesapeake Bay is nationally significant in part because it retains a high degree of integrity as a true, accurate, and relatively unspoiled example of the resource that it illustrates. Despite some changes in its vitality, the Chesapeake Bay continues to function as an intact estuary. Furthermore, part of what makes the Chesapeake Bay significant is the effort that has been made to understand the Chesapeake ecosystem and restore the Bay's health.

Summary

The Chesapeake Bay is undoubtedly nationally significant. The Bay is an outstanding and large example of a unique set of ecological and cultural elements with a long-standing importance to the history and development of the United States.

While the Chesapeake can be independently viewed as a significant natural resource, a significant historic and cultural resource, and an area that provides outstanding recreational opportunities, it can only truly be understood as an interconnected and interdependent mosaic. Real understanding of the Bay comes by viewing all elements through their context and interrelationships.

The Bay's natural resources are the basis of a rich cultural history and multitude of recreational opportunities. The region's cultural history in turn affects the natural environment. The Bay proper is dramatically influenced by its watershed. Many cultural patterns of the upper watershed developed because of connections with the Bay. The Chesapeake is truly a system where each part's significance is understood through the significance of the whole.

RECOGNITION OF THE SIGNIFICANCE OF THE CHESAPEAKE BAY

Recognition of the Chesapeake Bay as a living national treasure has long been a part of the regional and national conscience. More recently, state and federal government have heightened that recognition. The Chesapeake Bay was the first estuary in the United States targeted for intensive government-sponsored restoration efforts. Initiated and championed first by citizens, efforts were made to stop the pollution that had nearly killed the Bay by the early 1970s.

The Chesapeake Bay is now the focus of an intensive state/federal restoration and protection effort. In 1983 and 1987, the states of Virginia, Maryland, and Pennsylvania, the District of Columbia, the Chesapeake Bay Commission, and the U.S. Environmental Protection Agency, representing the federal

“The Chesapeake Bay is a national treasure that is worth preserving for its own sake.”

--President Ronald Reagan,
1984

government, signed historic agreements establishing the Chesapeake Bay Program partnership to protect and restore the Chesapeake Bay ecosystem. For almost two decades, these signatories have worked together as stewards to achieve improved water quality and improvements in the productivity of living resources of the Bay. This commitment was reaffirmed through the *Chesapeake 2000* agreement, wherein the signatories recognized that the Chesapeake Bay is a resource of extraordinary productivity and worthy of the highest levels of protection and restoration. The *Chesapeake 2000* agreement committed the Chesapeake Bay Program partners to 94 specific measurable goals, each goal, like the elements of the Bay itself, connected to all the others.

Congress, recognizing that the Chesapeake Bay is a national treasure and a resource of worldwide significance, enacted the *Chesapeake Bay Restoration Act of 2000* reauthorizing the continuance of the Chesapeake Bay Program to implement the comprehensive cooperative restoration program.

Noting the existence of outstanding resources and the need to study and interpret the connection between the unique cultural heritage of human settlements throughout the Chesapeake Bay watershed and the natural resources on which the settlements depend, the U.S. Congress passed the *Chesapeake Bay Initiative Act of 1998* (P.L. 105-312). The purposes of the Act are to:

- Create a linked network of Chesapeake Bay gateways and water trails;
- Provide financial and technical assistance to State and local governments, local communities, non-profit organizations, and the private sector for conserving important natural, cultural, historical, and recreational resources within the watershed.

The Chesapeake Bay Gateways Network, evolving in response to the *Chesapeake Bay Initiative Act*, is a growing partnership between a diverse array of special places within the Bay watershed, including but not limited to water trails, parks, wildlife refuges, historic communities, and maritime museums. By linking these gateways, the Network allows visitors and residents to more easily explore, understand, and conserve the Bay, its watershed, and related resources.

Fifteen agencies of the federal government, recognizing the importance of the Chesapeake Bay, joined together to sign the *Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay* (1994) and the *Federal Agencies Chesapeake Ecosystem Unified Plan* (1998). Guided by these agreements and a fundamental commitment to manage the Chesapeake Bay as a cohesive ecosystem, the federal agencies have built a record of accomplishment in a broad array of Bay stewardship objectives.

The National Park Service participates in the Chesapeake Bay Program through a Memorandum of Understanding with the United States Environmental Protection Agency and also carries out its responsibilities under the *Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay* and the *Federal Agencies' Chesapeake Ecosystem Unified Plan*. Through each of these agreements and through the legal requirements of the *Chesapeake Bay Restoration Act*, NPS is committed to a range of specific

actions to support and advance conservation and restoration of the Chesapeake Bay.

RESOURCES AND THEMES OF THE CHESAPEAKE BAY

What specific features, characteristics and stories best represent the true nature and significance of the large, diverse Chesapeake Bay? Answering this question is a starting point upon which to build an analysis of whether a Bay-focused unit of the National Park System is appropriate. This study uses two ways of viewing this question: (1) identifying a set of typical Chesapeake Bay resource types and (2) using a series of Chesapeake Bay interpretive themes. In combination, these approaches to viewing the Bay encompass its true meaning.

Typical Chesapeake Bay Resource Types

A series of resources that broadly typify the Chesapeake Bay were identified during the study process. While these resource types do not necessarily represent a comprehensive resource assessment, they form the basis of the essential elements of the tidal Chesapeake Bay experience.⁴ These resource types were confirmed through public workshops and consultations as being essential to the interpretation and conservation of the Chesapeake Bay story.

Natural Resource Types:

- Coastal plain geologic features (shoreline cliffs)
- Tidally-influenced tributaries
- Headwater streams
- Upland/headwater forests
- Meandering shorelines (necks, creeks)
- Forested shorelines
- Wetlands (saltwater brackish and freshwater marsh, swamp)
- Estuarine islands
- Open, generally shallow waters
- Submerged aquatic vegetation (SAV)
- Fish spawning and nursery areas
- Oyster beds
- Blue crab congregation areas
- Waterfowl wintering areas
- Sea duck foraging habitat (benthic concentration areas)
- Beaches
- Ecological restoration sites

Cultural Resource Types:

- Water oriented settlement sites
 - American Indian
 - Colonial
 - Plantations
 - Port/maritime communities

“...a faire Bay compassed but for the mouth with fruitful and delightsome land. Within is a country that may have the prerogative over the most pleasant places of Europe, Asia, Africa or America, for large and pleasant navigable rivers. Heaven and earth never agreed better to frame a place for man’s habitation.”

--Captain John Smith, 1612

⁴ A more comprehensive description of the Chesapeake Bay environment and resources can be found in Section 5 – The Affected Environment.

- Docks
- Boatyards, ship-building sites
- Fishing piers and wharves
- Seafood processing establishments
- Maritime historic districts
- Chesapeake Bay vessels (Skipjacks, Bugeyes, etc.)
- Water based transportation routes
- Watermen fishing areas
- Bay-oriented agricultural landscapes, working farms
- Water connected military sites on the Bay
 - Revolutionary War sites
 - War of 1812 sites
 - Civil War sites
 - 20th century sites

Recreational Opportunities:

- Scenic Bay shoreline vistas
- Scenic tributary rivers
- Recreational boating access
- Recreational fishing access sites
- Canoeing/Kayaking access points and routes
- Waterfowl hunting areas

Chesapeake Bay Themes

*“The baye is the most
delightful water I ever saw
between two sweet lands.”*

--Father Andrew White, 1634

The stories of the people, places, and events related to the Chesapeake Bay and its component resources are numerous and diverse. Organizing these stories in a comprehensive series of Bay themes allows a fuller understanding of the whole Chesapeake Bay story. Themes are also the organizing framework under which interpretation of natural and cultural resources is conducted.

The existing Chesapeake Bay Gateways Network established a thematic framework for the Chesapeake Bay in 2000. The framework includes a series of overarching and principal themes and many sub-themes or topics. These themes convey the breadth of Chesapeake Bay-related interpretation and are used as part of the analysis of opportunities and gaps explained in Section 3. The principal themes are listed below (Chesapeake Bay Gateways Network, 2000). A complete list of sub-themes can be found in Appendix A.

The Living, Natural Bay

A complex interaction of water, land, climate, geological formations and topographical features creates a unique ecosystem that supports the Bay’s remarkable diversity and abundance. Long before humans came to the Chesapeake region, natural forces were shaping the Bay and its watershed. With a surface area of 2,500 square miles, the Bay is one of the largest estuaries in the world, serving as home for a wide variety of plant and animal life. Today, both natural and human forces continue to impact and change the Bay and its watershed.

Peoples of the Bay

From early settlement to today, the natural environment of the Bay and the diverse population it attracted gave shape to distinctive cultural attractions. People from all over the world settled side-by-side along the Bay, with both cooperation and conflict marking their communities. Racial, religious, ethnic, political and economic divisions have been counterbalanced by united efforts, common concerns and shared values. Throughout the history of its peoples, the water and land of the Bay influenced and transformed the culture taking root. This heritage has given the region a distinctive style and identifiable sense of place.

Settlement of the Bay

The Chesapeake Bay and its tributaries have attracted settlement by humans throughout time, resulting in patterns that shape the region's landscape and reflect the nation's history. First, indigenous peoples, then Europeans, and soon after, Africans established footholds in the Bay area, opening a gateway for the burgeoning nation. The early arrivals dispersed along shorelines creating patterns of settlement characterizing the new nation and reflected to this day. Later arrivals have fueled the growth of the region's metropolitan centers. Throughout, the Bay has served as magnet and crucible, attracting, defining, shaping and reconfiguring the patterns of settlements around it.

The Bay as an Economic Resource--Commerce, Productivity and Transportation

The rich, natural abundance of the Bay has been a powerful incentive for commercial development, influencing the region's economy, transportation, and productivity. The Bay's resources and geography shaped the economic development of the region. Terrestrial and marine creatures, as well as the land and waterways, led to development of specific industries, harvesting methods, modes of transportation, and even boat designs. It is this resource-based economy and its connections to other parts of the nation and the world that are responsible for producing much of the image of the Bay area. Despite modern transformations, natural resources remain a fundamental component of the Bay's economy.

Military and Naval Presence on the Bay

Because of its vast waters and strategic location, the Bay has long played a critical role in the military and naval history of the United States. As the site of the nation's capital, historic battles and significant military installations, the Bay has long been intricately involved in a complex and dramatic web of national and international affairs. Today, the Chesapeake region continues to be home to a sizable military and naval presence.

The Bay as a Source of Recreation and Renewal

Abundant opportunities for a broad range of leisure-time activities, involving sport, education, culture and stewardship, spring from the vast resources and exquisite landscapes of the Chesapeake Bay. The traditional uses of the Bay's waters by area residents—boating, fishing, hunting—have long attracted visitors for recreation and renewal. Especially in recent decades, Bay-related recreation has become an economic force in the region. Today, the Chesapeake represents a source of inspiration and personal renewal through

its diverse recreational opportunities and the Bay's natural and cultural heritage on which they are based.

Environmental Stewardship and Sustainability of the Bay

The Bay and its living resources are suffering from the cumulative effects of human use and exploitation. But, new environmental attitudes, policies and behaviors offer hope for the Bay's renewal and sustainability. The realization that an ecological crisis exists has impelled residents, visitors, governments, and organizations to reassess the ways in which humans interact with the Bay and use its resources. The changes resulting from this attention are helping to restore the Bay and creating a world-wide model for environmental programs. Restoration and conservation are crucial to sustaining the Bay and its tributary rivers and streams that make such fundamental contributions to our well-being, our heritage, and our spirit.